

SEQUENCE LISTING

<110> GSK BIOLOGICALS S.A.

<120> EPSTEIN-BARR VIRUS ANTIGEN CONSTRUCTS

<130> VU66487 WO

<140>

<141>

<150> 62/608,038

<151> 2017-12-20

<160> 54

<170> PatentIn version 3.5

<210> 1

<211> 386

<212> PRT

<213> Human herpesvirus 4

<400> 1

Met	Glu	His	Asp	Leu	Glu	Arg	Gly	Pro	Pro	Gly	Pro	Arg	Arg	Pro	Pro
1				5					10					15	

Arg	Gly	Pro	Pro	Leu	Ser	Ser	Ser	Leu	Gly	Leu	Ala	Leu	Leu	Leu	Leu
			20					25					30		

Leu	Leu	Ala	Leu	Leu	Phe	Trp	Leu	Tyr	Ile	Val	Met	Ser	Asp	Trp	Thr
		35					40					45			

Gly	Gly	Ala	Leu	Leu	Val	Leu	Tyr	Ser	Phe	Ala	Leu	Met	Leu	Ile	Ile
	50					55					60				

Ile	Ile	Leu	Ile	Ile	Phe	Ile	Phe	Arg	Arg	Asp	Leu	Leu	Cys	Pro	Leu
65					70					75					80

Gly	Ala	Leu	Cys	Ile	Leu	Leu	Leu	Met	Ile	Thr	Leu	Leu	Leu	Ile	Ala
				85					90						95

Leu	Trp	Asn	Leu	His	Gly	Gln	Ala	Leu	Phe	Leu	Gly	Ile	Val	Leu	Phe
			100					105					110		

Ile	Phe	Gly	Cys	Leu	Leu	Val	Leu	Gly	Ile	Trp	Ile	Tyr	Leu	Leu	Glu
		115					120					125			

Met Leu Trp Arg Leu Gly Ala Thr Ile Trp Gln Leu Leu Ala Phe Phe
130 135 140

Leu Ala Phe Phe Leu Asp Leu Ile Leu Leu Ile Ile Ala Leu Tyr Leu
145 150 155 160

Gln Gln Asn Trp Trp Thr Leu Leu Val Asp Leu Leu Trp Leu Leu Leu
165 170 175

Phe Leu Ala Ile Leu Ile Trp Met Tyr Tyr His Gly Gln Arg His Ser
180 185 190

Asp Glu His His His Asp Asp Ser Leu Pro His Pro Gln Gln Ala Thr
195 200 205

Asp Asp Ser Gly His Glu Ser Asp Ser Asn Ser Asn Glu Gly Arg His
210 215 220

His Leu Leu Val Ser Gly Ala Gly Asp Gly Pro Pro Leu Cys Ser Gln
225 230 235 240

Asn Leu Gly Ala Pro Gly Gly Gly Pro Asp Asn Gly Pro Gln Asp Pro
245 250 255

Asp Asn Thr Asp Asp Asn Gly Pro Gln Asp Pro Asp Asn Thr Asp Asp
260 265 270

Asn Gly Pro His Asp Pro Leu Pro Gln Asp Pro Asp Asn Thr Asp Asp
275 280 285

Asn Gly Pro Gln Asp Pro Asp Asn Thr Asp Asp Asn Gly Pro His Asp
290 295 300

Pro Leu Pro His Ser Pro Ser Asp Ser Ala Gly Asn Asp Gly Gly Pro
305 310 315 320

Pro Gln Leu Thr Glu Glu Val Glu Asn Lys Gly Gly Asp Gln Gly Pro
325 330 335

Pro Leu Met Thr Asp Gly Gly Gly Gly His Ser His Asp Ser Gly His
340 345 350

Gly Gly Gly Asp Pro His Leu Pro Thr Leu Leu Leu Gly Ser Ser Gly
355 360 365

Ser Gly Gly Asp Asp Asp Asp Pro His Gly Pro Val Gln Leu Ser Tyr
370 375 380

Tyr Asp
385

<210> 2
<211> 62
<212> PRT
<213> Human herpesvirus 4

<400> 2
Met Ser Asp Trp Thr Gly Gly Ala Leu Leu Val Leu Tyr Ser Phe Ala
1 5 10 15

Leu Met Leu Ile Ile Ile Ile Leu Ile Ile Phe Ile Phe Arg Arg Asp
20 25 30

Leu Leu Cys Pro Leu Gly Ala Leu Cys Ile Leu Leu Leu Met Ile Thr
35 40 45

Leu Leu Leu Ile Ala Leu Trp Asn Leu His Gly Gln Ala Leu
50 55 60

<210> 3
<211> 85
<212> PRT
<213> Human herpesvirus 4

<400> 3
Phe Leu Gly Ile Val Leu Phe Ile Phe Gly Cys Leu Leu Val Leu Gly
1 5 10 15

Ile Trp Ile Tyr Leu Leu Glu Met Leu Trp Arg Leu Gly Ala Thr Ile
20 25 30

Trp Gln Leu Leu Ala Phe Phe Leu Ala Phe Phe Leu Asp Leu Ile Leu
35 40 45

Leu Ile Ile Ala Leu Tyr Leu Gln Gln Asn Trp Trp Thr Leu Leu Val
50 55 60

Asp Leu Leu Trp Leu Leu Leu Phe Leu Ala Ile Leu Ile Trp Met Tyr
65 70 75 80

Tyr His Gly Gln Arg
85

<210> 4
<211> 40
<212> PRT
<213> Human herpesvirus 4

<400> 4
His Ser Asp Glu His His His Asp Asp Ser Leu Pro His Pro Gln Gln
1 5 10 15

Ala Thr Asp Asp Ser Gly His Glu Ser Asp Ser Asn Ser Asn Glu Gly
20 25 30

Arg His His Leu Leu Val Ser Gly
35 40

<210> 5
<211> 114
<212> PRT
<213> Human herpesvirus 4

<400> 5
Asn Gly Pro His Asp Pro Leu Pro Gln Asp Pro Asp Asn Thr Asp Asp
1 5 10 15

Asn Gly Pro Gln Asp Pro Asp Asn Thr Asp Asp Asn Gly Pro His Asp
20 25 30

Pro Leu Pro His Ser Pro Ser Asp Ser Ala Gly Asn Asp Gly Gly Pro
35 40 45

Pro Gln Leu Thr Glu Glu Val Glu Asn Lys Gly Gly Asp Gln Gly Pro
50 55 60

Pro Leu Met Thr Asp Gly Gly Gly Gly His Ser His Asp Ser Gly His
65 70 75 80

Gly Gly Gly Asp Pro His Leu Pro Thr Leu Leu Leu Gly Ser Ser Gly
85 90 95

Ser Gly Gly Asp Asp Asp Asp Pro His Gly Pro Val Gln Leu Ser Tyr
100 105 110

Tyr Asp

<210> 6

<211> 497

<212> PRT

<213> Human herpesvirus 4

<400> 6

Met Gly Ser Leu Glu Met Val Pro Met Gly Ala Gly Pro Pro Ser Pro
1 5 10 15

Gly Gly Asp Pro Asp Gly Tyr Asp Gly Gly Asn Asn Ser Gln Tyr Pro
20 25 30

Ser Ala Ser Gly Ser Ser Gly Asn Thr Pro Thr Pro Pro Asn Asp Glu
35 40 45

Glu Arg Glu Ser Asn Glu Glu Pro Pro Pro Tyr Glu Asp Pro Tyr
50 55 60

Trp Gly Asn Gly Asp Arg His Ser Asp Tyr Gln Pro Leu Gly Thr Gln
65 70 75 80

Asp Gln Ser Leu Tyr Leu Gly Leu Gln His Asp Gly Asn Asp Gly Leu
85 90 95

Pro Pro Pro Pro Tyr Ser Pro Arg Asp Asp Ser Ser Gln His Ile Tyr
100 105 110

Glu Glu Ala Gly Arg Gly Ser Met Asn Pro Val Cys Leu Pro Val Ile
115 120 125

Val Ala Pro Tyr Leu Phe Trp Leu Ala Ala Ile Ala Ala Ser Cys Phe
130 135 140

Thr Ala Ser Val Ser Thr Val Val Thr Ala Thr Gly Leu Ala Leu Ser
145 150 155 160

Leu Leu Leu Leu Ala Ala Val Ala Ser Ser Tyr Ala Ala Ala Gln Arg
165 170 175

Lys Leu Leu Thr Pro Val Thr Val Leu Thr Ala Val Val Thr Phe Phe
180 185 190

Ala Ile Cys Leu Thr Trp Arg Ile Glu Asp Pro Pro Phe Asn Ser Leu
195 200 205

Leu Phe Ala Leu Leu Ala Ala Ala Gly Gly Leu Gln Gly Ile Tyr Val
210 215 220

Leu Val Met Leu Val Leu Leu Ile Leu Ala Tyr Arg Arg Arg Trp Arg
225 230 235 240

Arg Leu Thr Val Cys Gly Gly Ile Met Phe Leu Ala Cys Val Leu Val
245 250 255

Leu Ile Val Asp Ala Val Leu Gln Leu Ser Pro Leu Leu Gly Ala Val
260 265 270

Thr Val Val Ser Met Thr Leu Leu Leu Leu Ala Phe Val Leu Trp Leu
275 280 285

Ser Ser Pro Gly Gly Leu Gly Thr Leu Gly Ala Ala Leu Leu Thr Leu
290 295 300

Ala Ala Ala Leu Ala Leu Leu Ala Ser Leu Ile Leu Gly Thr Leu Asn
305 310 315 320

Leu Thr Thr Met Phe Leu Leu Met Leu Leu Trp Thr Leu Val Val Leu
325 330 335

Leu Ile Cys Ser Ser Cys Ser Ser Cys Pro Leu Ser Lys Ile Leu Leu
340 345 350

Ala Arg Leu Phe Leu Tyr Ala Leu Ala Leu Leu Leu Leu Ala Ser Ala
355 360 365

Leu Ile Ala Gly Gly Ser Ile Leu Gln Thr Asn Phe Lys Ser Leu Ser
370 375 380

Ser Thr Glu Phe Ile Pro Asn Leu Phe Cys Met Leu Leu Leu Ile Val
385 390 395 400

Ala Gly Ile Leu Phe Ile Leu Ala Ile Leu Thr Glu Trp Gly Ser Gly
405 410 415

Asn Arg Thr Tyr Gly Pro Val Phe Met Cys Leu Gly Gly Leu Leu Thr
420 425 430

Met Val Ala Gly Ala Val Trp Leu Thr Val Met Ser Asn Thr Leu Leu
435 440 445

Ser Ala Trp Ile Leu Thr Ala Gly Phe Leu Ile Phe Leu Ile Gly Phe
450 455 460

Ala Leu Phe Gly Val Ile Arg Cys Cys Arg Tyr Cys Cys Tyr Tyr Cys
465 470 475 480

Leu Thr Leu Glu Ser Glu Glu Arg Pro Pro Thr Pro Tyr Arg Asn Thr
485 490 495

Val

<210> 7

<211> 71

<212> PRT

<213> Human herpesvirus 4

<400> 7

Met Asn Pro Val Cys Leu Pro Val Ile Val Ala Pro Tyr Leu Phe Trp
1 5 10 15

Leu Ala Ala Ile Ala Ala Ser Cys Phe Thr Ala Ser Val Ser Thr Val
20 25 30

Val Thr Ala Thr Gly Leu Ala Leu Ser Leu Leu Leu Leu Ala Ala Val
35 40 45

Ala Ser Ser Tyr Ala Ala Ala Gln Arg Lys Leu Leu Thr Pro Val Thr
50 55 60

Val Leu Thr Ala Val Val Thr
65 70

<210> 8
<211> 94
<212> PRT
<213> Human herpesvirus 4

<400> 8
Phe Phe Ala Ile Cys Leu Thr Trp Arg Ile Glu Asp Pro Pro Phe Asn
1 5 10 15

Ser Leu Leu Phe Ala Leu Leu Ala Ala Ala Gly Gly Leu Gln Gly Ile
20 25 30

Tyr Val Leu Val Met Leu Val Leu Leu Ile Leu Ala Tyr Arg Arg Arg
35 40 45

Trp Arg Arg Leu Thr Val Cys Gly Gly Ile Met Phe Leu Ala Cys Val
50 55 60

Leu Val Leu Ile Val Asp Ala Val Leu Gln Leu Ser Pro Leu Leu Gly
65 70 75 80

Ala Val Thr Val Val Ser Met Thr Leu Leu Leu Leu Ala Phe
85 90

<210> 9
<211> 115
<212> PRT
<213> Human herpesvirus 4

<400> 9
Val Leu Trp Leu Ser Ser Pro Gly Gly Leu Gly Thr Leu Gly Ala Ala
1 5 10 15

Leu Leu Thr Leu Ala Ala Ala Leu Ala Leu Leu Ala Ser Leu Ile Leu
20 25 30

Gly Thr Leu Asn Leu Thr Thr Met Phe Leu Leu Met Leu Leu Trp Thr
35 40 45

Leu Val Val Leu Leu Ile Cys Ser Ser Cys Ser Ser Cys Pro Leu Ser
50 55 60

Lys Ile Leu Leu Ala Arg Leu Phe Leu Tyr Ala Leu Ala Leu Leu Leu
65 70 75 80

Leu Ala Ser Ala Leu Ile Ala Gly Gly Ser Ile Leu Gln Thr Asn Phe
85 90 95

Lys Ser Leu Ser Ser Thr Glu Phe Ile Pro Asn Leu Phe Cys Met Leu
100 105 110

Leu Leu Ile
115

<210> 10

<211> 98

<212> PRT

<213> Human herpesvirus 4

<400> 10

Val Ala Gly Ile Leu Phe Ile Leu Ala Ile Leu Thr Glu Trp Gly Ser
1 5 10 15

Gly Asn Arg Thr Tyr Gly Pro Val Phe Met Cys Leu Gly Gly Leu Leu
20 25 30

Thr Met Val Ala Gly Ala Val Trp Leu Thr Val Met Ser Asn Thr Leu
35 40 45

Leu Ser Ala Trp Ile Leu Thr Ala Gly Phe Leu Ile Phe Leu Ile Gly
50 55 60

Phe Ala Leu Phe Gly Val Ile Arg Cys Cys Arg Tyr Cys Cys Tyr Tyr
65 70 75 80

Cys Leu Thr Leu Glu Ser Glu Glu Arg Pro Pro Thr Pro Tyr Arg Asn
85 90 95

Thr Val

<210> 11

<211> 641

<212> PRT

<213> Human herpesvirus 4

<400> 11

Met Ser Asp Glu Gly Pro Gly Thr Gly Pro Gly Asn Gly Leu Gly Glu
1 5 10 15

Lys Gly Asp Thr Ser Gly Pro Glu Gly Ser Gly Gly Ser Gly Pro Gln
20 25 30

Arg Arg Gly Gly Asp Asn His Gly Arg Gly Arg Gly Arg Gly Arg Gly
35 40 45

Arg Gly Gly Gly Arg Pro Gly Ala Pro Gly Gly Ser Gly Ser Gly Pro
50 55 60

Arg His Arg Asp Gly Val Arg Arg Pro Gln Lys Arg Pro Ser Cys Ile
65 70 75 80

Gly Cys Lys Gly Thr His Gly Gly Thr Gly Ala Gly Ala Gly Ala Gly
85 90 95

Gly Ala Gly Ala Gly Gly Ala Gly Ala Gly Gly Gly Ala Gly Ala Gly
100 105 110

Gly Gly Ala Gly Gly Ala Gly Gly Ala Gly Gly Ala Gly Ala Gly Gly
115 120 125

Gly Ala Gly Ala Gly Gly Gly Ala Gly Gly Ala Gly Gly Ala Gly Ala
130 135 140

Gly Gly Gly Ala Gly Ala Gly Gly Gly Ala Gly Gly Ala Gly Ala Gly
145 150 155 160

Gly Gly Ala Gly Gly Ala Gly Gly Ala Gly Ala Gly Gly Gly Ala Gly
165 170 175

Ala Gly Gly Gly Ala Gly Gly Ala Gly Ala Gly Gly Gly Ala Gly Gly
180 185 190

Ala Gly Gly Ala Gly Ala Gly Gly Gly Ala Gly Ala Gly Gly Ala Gly
195 200 205

Gly Ala Gly Gly Ala Gly Ala Gly Gly Ala Gly Ala Gly Gly Gly Ala
210 215 220

Gly Gly Ala Gly Gly Ala Gly Ala Gly Gly Ala Gly Ala Gly Gly Ala
225 230 235 240

Gly Ala Gly Gly Ala Gly Ala Gly Gly Ala Gly Gly Ala Gly Ala Gly
245 250 255

Gly Ala Gly Gly Ala Gly Ala Gly Gly Ala Gly Gly Ala Gly Ala Gly
260 265 270

Gly Gly Ala Gly Gly Ala Gly Ala Gly Gly Gly Gly Ala Gly Gly Ala Gly
275 280 285

Ala Gly Gly Ala Gly Gly Ala Gly Ala Gly Gly Ala Gly Gly Ala Gly
290 295 300

Ala Gly Gly Ala Gly Gly Ala Gly Ala Gly Gly Gly Ala Gly Ala Gly
305 310 315 320

Gly Ala Gly Ala Gly Gly Gly Gly Arg Gly Arg Gly Gly Ser Gly Gly
325 330 335

Arg Gly Arg Gly Gly Ser Gly Gly Arg Gly Arg Gly Gly Ser Gly Gly
340 345 350

Arg Arg Gly Arg Gly Arg Glu Arg Ala Arg Gly Gly Ser Arg Glu Arg
355 360 365

Ala Arg Gly Arg Gly Arg Gly Arg Gly Glu Lys Arg Pro Arg Ser Pro
370 375 380

Ser Ser Gln Ser Ser Ser Ser Gly Ser Pro Pro Arg Arg Pro Pro Pro
385 390 395 400

Gly Arg Arg Pro Phe Phe His Pro Val Gly Glu Ala Asp Tyr Phe Glu
405 410 415

Tyr His Gln Glu Gly Gly Pro Asp Gly Glu Pro Asp Val Pro Pro Gly
420 425 430

Ala Ile Glu Gln Gly Pro Ala Asp Asp Pro Gly Glu Gly Pro Ser Thr
435 440 445

Gly Pro Arg Gly Gln Gly Asp Gly Gly Arg Arg Lys Lys Gly Gly Trp
450 455 460

Phe Gly Lys His Arg Gly Gln Gly Gly Ser Asn Pro Lys Phe Glu Asn
465 470 475 480

Ile Ala Glu Gly Leu Arg Ala Leu Leu Ala Arg Ser His Val Glu Arg
485 490 495

Thr Thr Asp Glu Gly Thr Trp Val Ala Gly Val Phe Val Tyr Gly Gly
500 505 510

Ser Lys Thr Ser Leu Tyr Asn Leu Arg Arg Gly Thr Ala Leu Ala Ile
515 520 525

Pro Gln Cys Arg Leu Thr Pro Leu Ser Arg Leu Pro Phe Gly Met Ala
530 535 540

Pro Gly Pro Gly Pro Gln Pro Gly Pro Leu Arg Glu Ser Ile Val Cys
545 550 555 560

Tyr Phe Met Val Phe Leu Gln Thr His Ile Phe Ala Glu Val Leu Lys
565 570 575

Asp Ala Ile Lys Asp Leu Val Met Thr Lys Pro Ala Pro Thr Cys Asn
580 585 590

Ile Arg Val Thr Val Cys Ser Phe Asp Asp Gly Val Asp Leu Pro Pro
595 600 605

Trp Phe Pro Pro Met Val Glu Gly Ala Ala Ala Glu Gly Asp Asp Gly
610 615 620

Asp Asp Gly Asp Glu Gly Gly Asp Gly Asp Glu Gly Glu Glu Gly Gln
625 630 635 640

Glu

<210> 12

<211> 86

<212> PRT

<213> Human herpesvirus 4

<400> 12

Met Ser Asp Glu Gly Pro Gly Thr Gly Pro Gly Asn Gly Leu Gly Glu
1 5 10 15

Lys Gly Asp Thr Ser Gly Pro Glu Gly Ser Gly Gly Ser Gly Pro Gln
20 25 30

Arg Arg Gly Gly Asp Asn His Gly Arg Gly Arg Gly Arg Gly Arg Gly
35 40 45

Arg Gly Gly Gly Arg Pro Gly Ala Pro Gly Gly Ser Gly Ser Gly Pro
50 55 60

Arg His Arg Asp Gly Val Arg Arg Pro Gln Lys Arg Pro Ser Cys Ile
65 70 75 80

Gly Cys Lys Gly Thr His
85

<210> 13

<211> 944

<212> PRT

<213> Human herpesvirus 4

<400> 13

Met Asp Lys Asp Arg Pro Gly Pro Pro Ala Leu Asp Asp Asn Met Glu
1 5 10 15

Glu Glu Val Pro Ser Thr Ser Val Val Gln Glu Gln Val Ser Ala Gly
20 25 30

Asp Trp Glu Asn Val Leu Ile Glu Leu Ser Asp Ser Ser Ser Glu Lys
35 40 45

Glu Ala Glu Asp Ala His Leu Glu Pro Ala Gln Lys Gly Thr Lys Arg
50 55 60

Lys Arg Val Asp His Asp Ala Gly Gly Ser Ala Pro Ala Arg Pro Met
65 70 75 80

Leu Pro Pro Gln Pro Asp Leu Pro Gly Arg Glu Ala Ile Leu Arg Arg
85 90 95

Phe Pro Leu Asp Leu Arg Thr Leu Leu Gln Ala Ile Gly Ala Ala Ala
100 105 110

Thr Arg Ile Asp Thr Arg Ala Ile Asp Gln Phe Phe Gly Ser Gln Ile
115 120 125

Ser Asn Thr Glu Met Tyr Ile Met Tyr Ala Met Ala Ile Arg Gln Ala
130 135 140

Ile Arg Asp Arg Arg Arg Asn Pro Ala Ser Arg Arg Asp Gln Ala Lys
145 150 155 160

Trp Arg Leu Gln Thr Leu Ala Ala Gly Trp Pro Met Gly Tyr Gln Ala
165 170 175

Tyr Ser Ser Trp Met Tyr Ser Tyr Thr Asp His Gln Thr Thr Pro Thr
180 185 190

Phe Val His Leu Gln Ala Thr Leu Gly Cys Thr Gly Gly Arg Arg Cys
195 200 205

His Val Thr Phe Ser Ala Gly Thr Phe Lys Leu Pro Arg Cys Thr Pro
210 215 220

Gly Asp Arg Gln Trp Leu Tyr Val Gln Ser Ser Val Gly Asn Ile Val
225 230 235 240

Gln Ser Cys Asn Pro Arg Tyr Ser Ile Phe Phe Asp Tyr Met Ala Ile
245 250 255

His Arg Ser Leu Thr Lys Ile Trp Glu Glu Val Leu Thr Pro Asp Gln
260 265 270

Arg Val Ser Phe Met Glu Phe Leu Gly Phe Leu Gln Arg Thr Asp Leu
275 280 285

Ser Tyr Ile Lys Ser Phe Val Ser Asp Ala Leu Gly Thr Thr Ser Ile
290 295 300

Gln Thr Pro Trp Ile Asp Asp Asn Pro Ser Thr Glu Thr Ala Gln Ala
305 310 315 320

Trp Asn Ala Gly Phe Leu Arg Gly Arg Ala Tyr Gly Ile Asp Leu Leu
325 330 335

Arg Thr Glu Gly Glu His Val Glu Gly Ala Thr Gly Glu Thr Arg Glu
340 345 350

Glu Ser Glu Asp Thr Glu Ser Asp Gly Asp Asp Glu Asp Leu Pro Cys
355 360 365

Ile Val Ser Arg Gly Gly Pro Lys Val Lys Arg Pro Pro Ile Phe Ile
370 375 380

Arg Arg Leu His Arg Leu Leu Leu Met Arg Ala Gly Lys Arg Thr Glu
385 390 395 400

Gln Gly Lys Glu Val Leu Glu Lys Ala Arg Gly Ser Thr Tyr Gly Thr
405 410 415

Pro Arg Pro Pro Val Pro Lys Pro Arg Pro Glu Val Pro Gln Ser Asp
420 425 430

Glu Thr Ala Thr Ser His Gly Ser Ala Gln Val Pro Glu Pro Pro Thr
435 440 445

Ile His Leu Ala Ala Gln Gly Met Ala Tyr Pro Leu His Glu Gln His
450 455 460

Gly Met Ala Pro Cys Pro Val Ala Gln Ala Pro Pro Thr Pro Leu Pro
465 470 475 480

Pro Val Ser Pro Gly Asp Gln Leu Pro Gly Val Phe Ser Asp Gly Arg
485 490 495

Val Ala Cys Ala Pro Val Pro Ala Pro Ala Gly Pro Ile Val Arg Pro
500 505 510

Trp Glu Pro Ser Leu Thr Gln Ala Ala Gly Gln Ala Phe Ala Pro Val
515 520 525

Arg Pro Gln His Met Pro Val Glu Pro Val Pro Val Pro Thr Val Ala
530 535 540

Leu Glu Arg Pro Val Tyr Pro Lys Pro Val Arg Pro Ala Pro Pro Lys
545 550 555 560

Ile Ala Met Gln Gly Pro Gly Glu Thr Ser Gly Ile Arg Arg Ala Arg
565 570 575

Glu Arg Trp Arg Pro Ala Pro Trp Thr Pro Asn Pro Pro Arg Ser Pro
580 585 590

Ser Gln Met Ser Val Arg Asp Arg Leu Ala Arg Leu Arg Ala Glu Ala
595 600 605

Gln Val Lys Gln Ala Ser Val Glu Val Gln Pro Pro Gln Leu Thr Gln
610 615 620

Val Ser Pro Gln Gln Pro Met Glu Gly Pro Leu Val Pro Glu Gln Gln
625 630 635 640

Met Phe Pro Gly Ala Pro Phe Ser Gln Val Ala Asp Val Val Arg Ala
645 650 655

Pro Gly Val Pro Ala Met Gln Pro Gln Tyr Phe Asp Leu Pro Leu Ile
660 665 670

Gln Pro Ile Ser Gln Gly Ala Pro Val Ala Pro Leu Arg Ala Ser Met
675 680 685

Gly Pro Val Pro Pro Val Pro Ala Thr Gln Pro Gln Tyr Phe Asp Ile
690 695 700

Pro Leu Thr Glu Pro Ile Asn Gln Gly Ala Ser Ala Ala His Phe Leu
705 710 715 720

Pro Gln Gln Pro Met Glu Gly Pro Leu Val Pro Glu Gln Trp Met Phe
725 730 735

Pro Gly Ala Ala Leu Ser Gln Ser Val Arg Pro Gly Val Ala Gln Ser
740 745 750

Gln Tyr Phe Asp Leu Pro Leu Thr Gln Pro Ile Asn His Gly Ala Pro
755 760 765

Ala Ala His Phe Leu His Gln Pro Pro Met Glu Gly Pro Trp Val Pro
770 775 780

Glu Gln Trp Met Phe Gln Gly Ala Pro Pro Ser Gln Gly Thr Asp Val
785 790 795 800

Val Gln His Gln Leu Asp Ala Leu Gly Tyr Thr Leu His Gly Leu Asn
805 810 815

His Pro Gly Val Pro Val Ser Pro Ala Val Asn Gln Tyr His Leu Ser
820 825 830

Gln Ala Ala Phe Gly Leu Pro Ile Asp Glu Asp Glu Ser Gly Glu Gly
835 840 845

Ser Asp Thr Ser Glu Pro Cys Glu Ala Leu Asp Leu Ser Ile His Gly
850 855 860

Arg Pro Cys Pro Gln Ala Pro Glu Trp Pro Val Gln Glu Glu Gly Gly
865 870 875 880

Gln Asp Ala Thr Glu Val Leu Asp Leu Ser Ile His Gly Arg Pro Arg
885 890 895

Pro Arg Thr Pro Glu Trp Pro Val Gln Gly Glu Gly Gly Gln Asn Val
900 905 910

Thr Gly Pro Glu Thr Arg Arg Val Val Val Ser Ala Val Val His Met
915 920 925

Cys Gln Asp Asp Glu Phe Pro Asp Leu Gln Asp Pro Pro Asp Glu Ala
930 935 940

<210> 14

<211> 66

<212> PRT

<213> Human herpesvirus 4

<400> 14

Ile Arg Asp Arg Arg Arg Asn Pro Ala Ser Arg Arg Asp Gln Ala Lys
1 5 10 15

Trp Arg Leu Gln Thr Leu Ala Ala Gly Trp Pro Met Gly Tyr Gln Ala
20 25 30

Tyr Ser Ser Trp Met Tyr Ser Tyr Thr Asp His Gln Thr Thr Pro Thr
35 40 45

Phe Val His Leu Gln Ala Thr Leu Gly Cys Thr Gly Gly Arg Arg Cys
50 55 60

His Val
65

<210> 15

<211> 55

<212> PRT

<213> Human herpesvirus 4

<400> 15

Thr Phe Ser Ala Gly Thr Phe Lys Leu Pro Arg Cys Thr Pro Gly Asp
1 5 10 15

Arg Gln Trp Leu Tyr Val Gln Ser Ser Val Gly Asn Ile Val Gln Ser
20 25 30

Cys Asn Pro Arg Tyr Ser Ile Phe Phe Asp Tyr Met Ala Ile His Arg
35 40 45

Ser Leu Thr Lys Ile Trp Glu
50 55

<210> 16

<211> 88

<212> PRT

<213> Human herpesvirus 4

<400> 16

Trp Ile Asp Asp Asn Pro Ser Thr Glu Thr Ala Gln Ala Trp Asn Ala
1 5 10 15

Gly Phe Leu Arg Gly Arg Ala Tyr Gly Ile Asp Leu Leu Arg Thr Glu
20 25 30

Gly Glu His Val Glu Gly Ala Thr Gly Glu Thr Arg Glu Glu Ser Glu
35 40 45

Asp Thr Glu Ser Asp Gly Asp Asp Glu Asp Leu Pro Cys Ile Val Ser
50 55 60

Arg Gly Gly Pro Lys Val Lys Arg Pro Pro Ile Phe Ile Arg Arg Leu
65 70 75 80

His Arg Leu Leu Leu Met Arg Ala
85

<210> 17

<211> 25

<212> PRT

<213> Human herpesvirus 4

<400> 17

Gly Lys Arg Thr Glu Gln Gly Lys Glu Val Leu Glu Lys Ala Arg Gly
1 5 10 15

Ser Thr Tyr Gly Thr Pro Arg Pro Pro
20 25

<210> 18
<211> 40
<212> PRT
<213> Human herpesvirus 4

<400> 18
Ala Gln Val Pro Glu Pro Pro Thr Ile His Leu Ala Ala Gln Gly Met
1 5 10 15

Ala Tyr Pro Leu His Glu Gln His Gly Met Ala Pro Cys Pro Val Ala
20 25 30

Gln Ala Pro Pro Thr Pro Leu Pro
35 40

<210> 19
<211> 62
<212> PRT
<213> Human herpesvirus 4

<400> 19
Gly Arg Val Ala Cys Ala Pro Val Pro Ala Pro Ala Gly Pro Ile Val
1 5 10 15

Arg Pro Trp Glu Pro Ser Leu Thr Gln Ala Ala Gly Gln Ala Phe Ala
20 25 30

Pro Val Arg Pro Gln His Met Pro Val Glu Pro Val Pro Val Pro Thr
35 40 45

Val Ala Leu Glu Arg Pro Val Tyr Pro Lys Pro Val Arg Pro
50 55 60

<210> 20
<211> 51
<212> PRT
<213> Human herpesvirus 4

<400> 20
Arg Pro Ala Pro Trp Thr Pro Asn Pro Pro Arg Ser Pro Ser Gln Met
1 5 10 15

Ser Val Arg Asp Arg Leu Ala Arg Leu Arg Ala Glu Ala Gln Val Lys
20 25 30

Gln Ala Ser Val Glu Val Gln Pro Pro Gln Leu Thr Gln Val Ser Pro
35 40 45

Gln Gln Pro
50

<210> 21
<211> 245
<212> PRT
<213> Human herpesvirus 4

<400> 21
Met Met Asp Pro Asn Ser Thr Ser Glu Asp Val Lys Phe Thr Pro Asp
1 5 10 15

Pro Tyr Gln Val Pro Phe Val Gln Ala Phe Asp Gln Ala Thr Arg Val
20 25 30

Tyr Gln Asp Leu Gly Gly Pro Ser Gln Ala Pro Leu Pro Cys Val Leu
35 40 45

Trp Pro Val Leu Pro Glu Pro Leu Pro Gln Gly Gln Leu Thr Ala Tyr
50 55 60

His Val Ser Thr Ala Pro Thr Gly Ser Trp Phe Ser Ala Pro Gln Pro
65 70 75 80

Ala Pro Glu Asn Ala Tyr Gln Ala Tyr Ala Ala Pro Gln Leu Phe Pro
85 90 95

Val Ser Asp Ile Thr Gln Asn Gln Gln Thr Asn Gln Ala Gly Gly Glu
100 105 110

Ala Pro Gln Pro Gly Asp Asn Ser Thr Val Gln Thr Ala Ala Ala Val
115 120 125

Val Phe Ala Cys Pro Gly Ala Asn Gln Gly Gln Gln Leu Ala Asp Ile
130 135 140

Gly Val Pro Gln Pro Ala Pro Val Ala Ala Pro Ala Arg Arg Thr Arg
145 150 155 160

Lys Pro Gln Gln Pro Glu Ser Leu Glu Glu Cys Asp Ser Glu Leu Glu
165 170 175

Ile Lys Arg Tyr Lys Asn Arg Val Ala Ser Arg Lys Cys Arg Ala Lys
180 185 190

Phe Lys Gln Leu Leu Gln His Tyr Arg Glu Val Ala Ala Ala Lys Ser
195 200 205

Ser Glu Asn Asp Arg Leu Arg Leu Leu Leu Lys Gln Met Cys Pro Ser
210 215 220

Leu Asp Val Asp Ser Ile Ile Pro Arg Thr Pro Asp Val Leu His Glu
225 230 235 240

Asp Leu Leu Asn Phe
245

<210> 22
<211> 66
<212> PRT
<213> Human herpesvirus 4

<400> 22
Asp Leu Gly Gly Pro Ser Gln Ala Pro Leu Pro Cys Val Leu Trp Pro
1 5 10 15

Val Leu Pro Glu Pro Leu Pro Gln Gly Gln Leu Thr Ala Tyr His Val
20 25 30

Ser Thr Ala Pro Thr Gly Ser Trp Phe Ser Ala Pro Gln Pro Ala Pro
35 40 45

Glu Asn Ala Tyr Gln Ala Tyr Ala Ala Pro Gln Leu Phe Pro Val Ser
50 55 60

Asp Ile
65

<210> 23
<211> 51

<212> PRT

<213> Human herpesvirus 4

<400> 23

Arg Lys Pro Gln Gln Pro Glu Ser Leu Glu Glu Cys Asp Ser Glu Leu
1 5 10 15

Glu Ile Lys Arg Tyr Lys Asn Arg Val Ala Ser Arg Lys Cys Arg Ala
20 25 30

Lys Phe Lys Gln Leu Leu Gln His Tyr Arg Glu Val Ala Ala Ala Lys
35 40 45

Ser Ser Glu
50

<210> 24

<211> 1153

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 24

Met Arg Pro Ala Pro Trp Thr Pro Asn Pro Pro Arg Ser Pro Ser Gln
1 5 10 15

Met Ser Val Arg Asp Arg Leu Ala Arg Leu Arg Ala Glu Ala Gln Val
20 25 30

Lys Gln Ala Ser Val Glu Val Gln Pro Pro Gln Leu Thr Gln Val Ser
35 40 45

Pro Gln Gln Pro Val Ala Gly Ile Leu Phe Ile Leu Ala Ile Leu Thr
50 55 60

Glu Trp Gly Ser Gly Asn Arg Thr Tyr Gly Pro Val Phe Met Cys Leu
65 70 75 80

Gly Gly Leu Leu Thr Met Val Ala Gly Ala Val Trp Leu Thr Val Met
85 90 95

Ser Asn Thr Leu Leu Ser Ala Trp Ile Leu Thr Ala Gly Phe Leu Ile
100 105 110

Phe Leu Ile Gly Phe Ala Leu Phe Gly Val Ile Arg Cys Cys Arg Tyr
115 120 125

Cys Cys Tyr Tyr Cys Leu Thr Leu Glu Ser Glu Glu Arg Pro Pro Thr
130 135 140

Pro Tyr Arg Asn Thr Val Ile Arg Asp Arg Arg Arg Asn Pro Ala Ser
145 150 155 160

Arg Arg Asp Gln Ala Lys Trp Arg Leu Gln Thr Leu Ala Ala Gly Trp
165 170 175

Pro Met Gly Tyr Gln Ala Tyr Ser Ser Trp Met Tyr Ser Tyr Thr Asp
180 185 190

His Gln Thr Thr Pro Thr Phe Val His Leu Gln Ala Thr Leu Gly Cys
195 200 205

Thr Gly Gly Arg Arg Cys His Val Phe Leu Gly Ile Val Leu Phe Ile
210 215 220

Phe Gly Cys Leu Leu Val Leu Gly Ile Trp Ile Tyr Leu Leu Glu Met
225 230 235 240

Leu Trp Arg Leu Gly Ala Thr Ile Trp Gln Leu Leu Ala Phe Phe Leu
245 250 255

Ala Phe Phe Leu Asp Leu Ile Leu Leu Ile Ile Ala Leu Tyr Leu Gln
260 265 270

Gln Asn Trp Trp Thr Leu Leu Val Asp Leu Leu Trp Leu Leu Leu Phe
275 280 285

Leu Ala Ile Leu Ile Trp Met Tyr Tyr His Gly Gln Arg Gly Arg Val
290 295 300

Ala Cys Ala Pro Val Pro Ala Pro Ala Gly Pro Ile Val Arg Pro Trp

305		310		315		320									
Glu	Pro	Ser	Leu	Thr	Gln	Ala	Ala	Gly	Gln	Ala	Phe	Ala	Pro	Val	Arg
			325					330						335	
Pro	Gln	His	Met	Pro	Val	Glu	Pro	Val	Pro	Val	Pro	Thr	Val	Ala	Leu
			340					345					350		
Glu	Arg	Pro	Val	Tyr	Pro	Lys	Pro	Val	Arg	Pro	Val	Leu	Trp	Leu	Ser
		355					360					365			
Ser	Pro	Gly	Gly	Leu	Gly	Thr	Leu	Gly	Ala	Ala	Leu	Leu	Thr	Leu	Ala
	370					375					380				
Ala	Ala	Leu	Ala	Leu	Leu	Ala	Ser	Leu	Ile	Leu	Gly	Thr	Leu	Asn	Leu
385					390					395					400
Thr	Thr	Met	Phe	Leu	Leu	Met	Leu	Leu	Trp	Thr	Leu	Val	Val	Leu	Leu
			405						410					415	
Ile	Cys	Ser	Ser	Cys	Ser	Ser	Cys	Pro	Leu	Ser	Lys	Ile	Leu	Leu	Ala
		420					425					430			
Arg	Leu	Phe	Leu	Tyr	Ala	Leu	Ala	Leu	Leu	Leu	Leu	Ala	Ser	Ala	Leu
		435					440					445			
Ile	Ala	Gly	Gly	Ser	Ile	Leu	Gln	Thr	Asn	Phe	Lys	Ser	Leu	Ser	Ser
	450					455					460				
Thr	Glu	Phe	Ile	Pro	Asn	Leu	Phe	Cys	Met	Leu	Leu	Leu	Ile	His	Ser
465					470					475				480	
Asp	Glu	His	His	His	Asp	Asp	Ser	Leu	Pro	His	Pro	Gln	Gln	Ala	Thr
			485						490					495	
Asp	Asp	Ser	Gly	His	Glu	Ser	Asp	Ser	Asn	Ser	Asn	Glu	Gly	Arg	His
			500					505					510		
His	Leu	Leu	Val	Ser	Gly	Ala	Gln	Val	Pro	Glu	Pro	Pro	Thr	Ile	His
		515					520					525			

Leu Ala Ala Gln Gly Met Ala Tyr Pro Leu His Glu Gln His Gly Met
530 535 540

Ala Pro Cys Pro Val Ala Gln Ala Pro Pro Thr Pro Leu Pro Phe Phe
545 550 555 560

Ala Ile Cys Leu Thr Trp Arg Ile Glu Asp Pro Pro Phe Asn Ser Leu
565 570 575

Leu Phe Ala Leu Leu Ala Ala Ala Gly Gly Leu Gln Gly Ile Tyr Val
580 585 590

Leu Val Met Leu Val Leu Leu Ile Leu Ala Tyr Arg Arg Arg Trp Arg
595 600 605

Arg Leu Thr Val Cys Gly Gly Ile Met Phe Leu Ala Cys Val Leu Val
610 615 620

Leu Ile Val Asp Ala Val Leu Gln Leu Ser Pro Leu Leu Gly Ala Val
625 630 635 640

Thr Val Val Ser Met Thr Leu Leu Leu Leu Ala Phe Asn Gly Pro His
645 650 655

Asp Pro Leu Pro Gln Asp Pro Asp Asn Thr Asp Asp Asn Gly Pro Gln
660 665 670

Asp Pro Asp Asn Thr Asp Asp Asn Gly Pro His Asp Pro Leu Pro His
675 680 685

Ser Pro Ser Asp Ser Ala Gly Asn Asp Gly Gly Pro Pro Gln Leu Thr
690 695 700

Glu Glu Val Glu Asn Lys Gly Gly Asp Gln Gly Pro Pro Leu Met Thr
705 710 715 720

Asp Gly Gly Gly Gly His Ser His Asp Ser Gly His Gly Gly Gly Asp
725 730 735

Pro His Leu Pro Thr Leu Leu Leu Gly Ser Ser Gly Ser Gly Gly Asp

740

745

750

Asp Asp Asp Pro His Gly Pro Val Gln Leu Ser Tyr Tyr Asp Gly Lys
 755 760 765

Arg Thr Glu Gln Gly Lys Glu Val Leu Glu Lys Ala Arg Gly Ser Thr
 770 775 780

Tyr Gly Thr Pro Arg Pro Pro Met Ser Asp Trp Thr Gly Gly Ala Leu
 785 790 795 800

Leu Val Leu Tyr Ser Phe Ala Leu Met Leu Ile Ile Ile Ile Leu Ile
 805 810 815

Ile Phe Ile Phe Arg Arg Asp Leu Leu Cys Pro Leu Gly Ala Leu Cys
 820 825 830

Ile Leu Leu Leu Met Ile Thr Leu Leu Leu Ile Ala Leu Trp Asn Leu
 835 840 845

His Gly Gln Ala Leu Met Ser Asp Glu Gly Pro Gly Thr Gly Pro Gly
 850 855 860

Asn Gly Leu Gly Glu Lys Gly Asp Thr Ser Gly Pro Glu Gly Ser Gly
 865 870 875 880

Gly Ser Gly Pro Gln Arg Arg Gly Gly Asp Asn His Gly Arg Gly Arg
 885 890 895

Gly Arg Gly Arg Gly Arg Gly Gly Gly Arg Pro Gly Ala Pro Gly Gly
 900 905 910

Ser Gly Ser Gly Pro Arg His Arg Asp Gly Val Arg Arg Pro Gln Lys
 915 920 925

Arg Pro Ser Cys Ile Gly Cys Lys Gly Thr His Trp Ile Asp Asp Asn
 930 935 940

Pro Ser Thr Glu Thr Ala Gln Ala Trp Asn Ala Gly Phe Leu Arg Gly
 945 950 955 960

Arg Ala Tyr Gly Ile Asp Leu Leu Arg Thr Glu Gly Glu His Val Glu
965 970 975

Gly Ala Thr Gly Glu Thr Arg Glu Glu Ser Glu Asp Thr Glu Ser Asp
980 985 990

Gly Asp Asp Glu Asp Leu Pro Cys Ile Val Ser Arg Gly Gly Pro Lys
995 1000 1005

Val Lys Arg Pro Pro Ile Phe Ile Arg Arg Leu His Arg Leu Leu
1010 1015 1020

Leu Met Arg Ala Met Asn Pro Val Cys Leu Pro Val Ile Val Ala
1025 1030 1035

Pro Tyr Leu Phe Trp Leu Ala Ala Ile Ala Ala Ser Cys Phe Thr
1040 1045 1050

Ala Ser Val Ser Thr Val Val Thr Ala Thr Gly Leu Ala Leu Ser
1055 1060 1065

Leu Leu Leu Leu Ala Ala Val Ala Ser Ser Tyr Ala Ala Ala Gln
1070 1075 1080

Arg Lys Leu Leu Thr Pro Val Thr Val Leu Thr Ala Val Val Thr
1085 1090 1095

Thr Phe Ser Ala Gly Thr Phe Lys Leu Pro Arg Cys Thr Pro Gly
1100 1105 1110

Asp Arg Gln Trp Leu Tyr Val Gln Ser Ser Val Gly Asn Ile Val
1115 1120 1125

Gln Ser Cys Asn Pro Arg Tyr Ser Ile Phe Phe Asp Tyr Met Ala
1130 1135 1140

Ile His Arg Ser Leu Thr Lys Ile Trp Glu
1145 1150

<210> 25

<211> 3459
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 25
atgagacctg ctccctggac acctaatacct cccaggtccc ccagccagat gagcgtgaga 60
gacagactgg ctaggctgag agccgaggct caggtcaagc aggccagcgt cgaggtgcaa 120
ccccctcagc tcacccaggt gtccccccag cagcctgtgg ccggcattct gttcattctg 180
gccattctga ccgagtgggg aagcggcaac agaacctac gccctgtctt catgtgcctc 240
ggaggactgc tgacaatggt ggctggcgcc gtgtggctca ccgtcatgtc caacaccctg 300
ctcagcgcct ggattctgac cgccggattc ctgatctttc tgatcggatt cgctctcttt 360
ggcgtcatca ggtgttgag gtactgttg tactactgcc tgaccctcga gagcaggagaa 420
agacccccca cccctacag gaatacagt attagggaca gaaggaggaa tcctgcctcc 480
aggagagacc aggccaaatg gagactccaa acactcgccg ctggatggcc catgggctac 540
caggcctata gtcctggat gtacagctac accgaccatc agacaacacc caccttcgtg 600
catctgcagg ctacactggg ctgcaccgga ggcagaaggt gtcacgtgtt tctgggaatc 660
gtgctgttca tctttggatg cctgctcgtg ctgggcatct ggatttatct cctggagatg 720
ctctggagac tcggcgctac aatttggcag ctgctcgctt tttttctggc cttctttctg 780
gacctgatcc tcctgatcat cgccctgtac ctccaacaga actggtggac cctcctggtg 840
gatctgctgt ggctcctcct cttcctggcc atcctgatct ggatgtacta ccatggccag 900
agaggaaggg tcgcttgccg tcctgtccct gtcctgctg gccccatcgt gaggccttgg 960
gagccttccc tcacacaggc cgccggccag gcctttgctc ccgtgaggcc ccagcacatg 1020
cctgtggaac ccgtgcccgt cccacagtg gctctggaaa ggctgtgta cccaagccc 1080
gtgagacctg tcctctggct cagcagccct ggaggactcg gaacactcgg agccgctctc 1140
ctgacactgg ccgctgctct ggctctgctg gctagcctga tcctgggaac cctcaacctc 1200
accaccatgt ttctcctcat gtcctgttg accctcgtgg tgctgctcat ctgttccagc 1260
tgctccagct gccccctgag caagatcctg ctggccaggc tgttcctgta cgccctcgcc 1320

ctcctgctgc tggctagcgc cctgatcgct ggcggaagca tcctccagac caatttcaag	1380
agcctctcct ccaccgagtt catccccaac ctgttctgta tgttactgct gatccatagc	1440
gacgagcacc atcatgacga ctccctgccc catcctcagc aggccacaga cgactccggc	1500
cacgagagcg acagcaatag caatgagggc aggcaccatc tgctcgtgtc cggagctcaa	1560
gtccccgagc ctcccacat ccatctcgcc gccagggaa tggcttacct cctccacgag	1620
cagcacggca tggccccttg tcccgtcgct caagcccccc ctacacctct gccctttttc	1680
gccatttgtc tgacctggag aatcgaggac ccccccttca acagcctgct gttcgccctg	1740
ctcgccgccg ctggcggcct ccagggcatt tacgtcctcg tgatgctggt gctgctgac	1800
ctcgcttaca ggagaagatg gaggagactg acagtgtgcg gcggcatcat gtttctcgcc	1860
tgcgtcctgg tcctgatcgt ggacgccgtc ctgcaactca gccccctcct gggagctgtg	1920
acagtggctc ccatgaccct gctgctgctg gccttcaacg gacccacga tcctctgccc	1980
caagatcctg acaataccga cgataacggc cccaagacc ccgataacac cgacgacaat	2040
ggccctcacg accctctgcc ccatagccct tccgatagcg ctggcaacga tggcggccct	2100
cctcagctga cagaggaggt ggaaaataag ggcggcgatc agggaccccc cctgatgaca	2160
gatggcggag gaggacacag ccatgatagc ggacatggcg gaggcgatcc ccatctgcct	2220
accctcctcc tgggcagctc cggttctgga ggcgacgatg atgaccctca cggccctgtg	2280
cagctctcct actacgacgg caaaaggacc gaacaaggaa aagaggtcct ggagaaggcc	2340
aggggcagca catacggaa cccagggcct cccatgtccg attggaccgg aggagccctg	2400
ctggtcctct acagcttcgc cctgatgctg atcattatca tcctgatcat ctttatcttc	2460
agaagggacc tgctgtgccc tctcggcgcc ctgtgcatcc tgctgctcat gatcacactc	2520
ctcctgatcg ccctctggaa cctgcacgga caagccctga tgtccgatga gggacctgga	2580
acaggacccg gaaacggact gggcgagaag ggagatacaa gcggccccga aggcagcggc	2640
ggaagcggac cccaaagaag gggcggcgac aaccacggaa gaggaagagg caggggcaga	2700
ggcagaggag gaggaagacc tggagcccct ggcggttctg gaagcggacc caggcacagg	2760
gacggagtga ggaggcctca aaaaagaccc agctgcatcg gctgcaaggg aaccactgg	2820
attgatgata acccctccac agagaccgct caggcctgga acgccggctt cctgagggga	2880
agagcctatg gcatcgatct gctgaggacc gagggcgaac acgtggaggg agccaccgga	2940

gagacaaggg aggaaagcga agacacagaa agcgatggcg acgacgaaga cctgccctgc 3000
 attgtgtcca ggggcggacc caaggtgaag aggcccccta tctttatcag aaggctccat 3060
 agactgctcc tgatgagggc catgaaccct gtgtgcctgc ccgtgatcgt ggccccctac 3120
 ctcttttggc tggccgcat tgccgctagc tgcttcaccg cctccgtgtc cacagtgggtg 3180
 acagccaccg gcctcgccct gagcctgctg ctctcgctg ccgtggcctc cagctacgcc 3240
 gctgctcaaa gaaagctcct gaccctgtc accgtcctga cagccgtcgt gaccaccttt 3300
 tccgctggca cttcaagct gcctaggtgc acacctggcg acaggcagtg gctctacgtg 3360
 cagagctccg tgggcaatat tgtgcagagc tgcaatccca ggtacagcat ttttttcgac 3420
 tacatggcca tccataggtc cctcaccaag atctgggag 3459

<210> 26

<211> 1270

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 26

Met Arg Pro Ala Pro Trp Thr Pro Asn Pro Pro Arg Ser Pro Ser Gln
 1 5 10 15

Met Ser Val Arg Asp Arg Leu Ala Arg Leu Arg Ala Glu Ala Gln Val
 20 25 30

Lys Gln Ala Ser Val Glu Val Gln Pro Pro Gln Leu Thr Gln Val Ser
 35 40 45

Pro Gln Gln Pro Val Ala Gly Ile Leu Phe Ile Leu Ala Ile Leu Thr
 50 55 60

Glu Trp Gly Ser Gly Asn Arg Thr Tyr Gly Pro Val Phe Met Cys Leu
 65 70 75 80

Gly Gly Leu Leu Thr Met Val Ala Gly Ala Val Trp Leu Thr Val Met
 85 90 95

Ser Asn Thr Leu Leu Ser Ala Trp Ile Leu Thr Ala Gly Phe Leu Ile
100 105 110

Phe Leu Ile Gly Phe Ala Leu Phe Gly Val Ile Arg Cys Cys Arg Tyr
115 120 125

Cys Cys Tyr Tyr Cys Leu Thr Leu Glu Ser Glu Glu Arg Pro Pro Thr
130 135 140

Pro Tyr Arg Asn Thr Val Arg Lys Pro Gln Gln Pro Glu Ser Leu Glu
145 150 155 160

Glu Cys Asp Ser Glu Leu Glu Ile Lys Arg Tyr Lys Asn Arg Val Ala
165 170 175

Ser Arg Lys Cys Arg Ala Lys Phe Lys Gln Leu Leu Gln His Tyr Arg
180 185 190

Glu Val Ala Ala Ala Lys Ser Ser Glu Ile Arg Asp Arg Arg Arg Asn
195 200 205

Pro Ala Ser Arg Arg Asp Gln Ala Lys Trp Arg Leu Gln Thr Leu Ala
210 215 220

Ala Gly Trp Pro Met Gly Tyr Gln Ala Tyr Ser Ser Trp Met Tyr Ser
225 230 235 240

Tyr Thr Asp His Gln Thr Thr Pro Thr Phe Val His Leu Gln Ala Thr
245 250 255

Leu Gly Cys Thr Gly Gly Arg Arg Cys His Val Phe Leu Gly Ile Val
260 265 270

Leu Phe Ile Phe Gly Cys Leu Leu Val Leu Gly Ile Trp Ile Tyr Leu
275 280 285

Leu Glu Met Leu Trp Arg Leu Gly Ala Thr Ile Trp Gln Leu Leu Ala
290 295 300

Phe Phe Leu Ala Phe Phe Leu Asp Leu Ile Leu Leu Ile Ile Ala Leu
305 310 315 320

Tyr Leu Gln Gln Asn Trp Trp Thr Leu Leu Val Asp Leu Leu Trp Leu
325 330 335

Leu Leu Phe Leu Ala Ile Leu Ile Trp Met Tyr Tyr His Gly Gln Arg
340 345 350

Gly Arg Val Ala Cys Ala Pro Val Pro Ala Pro Ala Gly Pro Ile Val
355 360 365

Arg Pro Trp Glu Pro Ser Leu Thr Gln Ala Ala Gly Gln Ala Phe Ala
370 375 380

Pro Val Arg Pro Gln His Met Pro Val Glu Pro Val Pro Val Pro Thr
385 390 395 400

Val Ala Leu Glu Arg Pro Val Tyr Pro Lys Pro Val Arg Pro Val Leu
405 410 415

Trp Leu Ser Ser Pro Gly Gly Leu Gly Thr Leu Gly Ala Ala Leu Leu
420 425 430

Thr Leu Ala Ala Ala Leu Ala Leu Leu Ala Ser Leu Ile Leu Gly Thr
435 440 445

Leu Asn Leu Thr Thr Met Phe Leu Leu Met Leu Leu Trp Thr Leu Val
450 455 460

Val Leu Leu Ile Cys Ser Ser Cys Ser Ser Cys Pro Leu Ser Lys Ile
465 470 475 480

Leu Leu Ala Arg Leu Phe Leu Tyr Ala Leu Ala Leu Leu Leu Leu Ala
485 490 495

Ser Ala Leu Ile Ala Gly Gly Ser Ile Leu Gln Thr Asn Phe Lys Ser
500 505 510

Leu Ser Ser Thr Glu Phe Ile Pro Asn Leu Phe Cys Met Leu Leu Leu
515 520 525

Ile His Ser Asp Glu His His His Asp Asp Ser Leu Pro His Pro Gln
530 535 540

Gln Ala Thr Asp Asp Ser Gly His Glu Ser Asp Ser Asn Ser Asn Glu
545 550 555 560

Gly Arg His His Leu Leu Val Ser Gly Ala Gln Val Pro Glu Pro Pro
565 570 575

Thr Ile His Leu Ala Ala Gln Gly Met Ala Tyr Pro Leu His Glu Gln
580 585 590

His Gly Met Ala Pro Cys Pro Val Ala Gln Ala Pro Pro Thr Pro Leu
595 600 605

Pro Phe Phe Ala Ile Cys Leu Thr Trp Arg Ile Glu Asp Pro Pro Phe
610 615 620

Asn Ser Leu Leu Phe Ala Leu Leu Ala Ala Ala Gly Gly Leu Gln Gly
625 630 635 640

Ile Tyr Val Leu Val Met Leu Val Leu Leu Ile Leu Ala Tyr Arg Arg
645 650 655

Arg Trp Arg Arg Leu Thr Val Cys Gly Gly Ile Met Phe Leu Ala Cys
660 665 670

Val Leu Val Leu Ile Val Asp Ala Val Leu Gln Leu Ser Pro Leu Leu
675 680 685

Gly Ala Val Thr Val Val Ser Met Thr Leu Leu Leu Leu Ala Phe Asn
690 695 700

Gly Pro His Asp Pro Leu Pro Gln Asp Pro Asp Asn Thr Asp Asp Asn
705 710 715 720

Gly Pro Gln Asp Pro Asp Asn Thr Asp Asp Asn Gly Pro His Asp Pro
725 730 735

Leu Pro His Ser Pro Ser Asp Ser Ala Gly Asn Asp Gly Gly Pro Pro
740 745 750

Gln Leu Thr Glu Glu Val Glu Asn Lys Gly Gly Asp Gln Gly Pro Pro
755 760 765

Leu Met Thr Asp Gly Gly Gly Gly His Ser His Asp Ser Gly His Gly
770 775 780

Gly Gly Asp Pro His Leu Pro Thr Leu Leu Leu Gly Ser Ser Gly Ser
785 790 795 800

Gly Gly Asp Asp Asp Asp Pro His Gly Pro Val Gln Leu Ser Tyr Tyr
805 810 815

Asp Gly Lys Arg Thr Glu Gln Gly Lys Glu Val Leu Glu Lys Ala Arg
820 825 830

Gly Ser Thr Tyr Gly Thr Pro Arg Pro Pro Met Ser Asp Trp Thr Gly
835 840 845

Gly Ala Leu Leu Val Leu Tyr Ser Phe Ala Leu Met Leu Ile Ile Ile
850 855 860

Ile Leu Ile Ile Phe Ile Phe Arg Arg Asp Leu Leu Cys Pro Leu Gly
865 870 875 880

Ala Leu Cys Ile Leu Leu Leu Met Ile Thr Leu Leu Leu Ile Ala Leu
885 890 895

Trp Asn Leu His Gly Gln Ala Leu Met Ser Asp Glu Gly Pro Gly Thr
900 905 910

Gly Pro Gly Asn Gly Leu Gly Glu Lys Gly Asp Thr Ser Gly Pro Glu
915 920 925

Gly Ser Gly Gly Ser Gly Pro Gln Arg Arg Gly Gly Asp Asn His Gly
930 935 940

Arg Gly Arg Gly Arg Gly Arg Gly Arg Gly Gly Gly Arg Pro Gly Ala
945 950 955 960

Pro Gly Gly Ser Gly Ser Gly Pro Arg His Arg Asp Gly Val Arg Arg
965 970 975

Pro Gln Lys Arg Pro Ser Cys Ile Gly Cys Lys Gly Thr His Trp Ile
980 985 990

Asp Asp Asn Pro Ser Thr Glu Thr Ala Gln Ala Trp Asn Ala Gly Phe
995 1000 1005

Leu Arg Gly Arg Ala Tyr Gly Ile Asp Leu Leu Arg Thr Glu Gly
1010 1015 1020

Glu His Val Glu Gly Ala Thr Gly Glu Thr Arg Glu Glu Ser Glu
1025 1030 1035

Asp Thr Glu Ser Asp Gly Asp Asp Glu Asp Leu Pro Cys Ile Val
1040 1045 1050

Ser Arg Gly Gly Pro Lys Val Lys Arg Pro Pro Ile Phe Ile Arg
1055 1060 1065

Arg Leu His Arg Leu Leu Leu Met Arg Ala Met Asn Pro Val Cys
1070 1075 1080

Leu Pro Val Ile Val Ala Pro Tyr Leu Phe Trp Leu Ala Ala Ile
1085 1090 1095

Ala Ala Ser Cys Phe Thr Ala Ser Val Ser Thr Val Val Thr Ala
1100 1105 1110

Thr Gly Leu Ala Leu Ser Leu Leu Leu Leu Ala Ala Val Ala Ser
1115 1120 1125

Ser Tyr Ala Ala Ala Gln Arg Lys Leu Leu Thr Pro Val Thr Val
1130 1135 1140

Leu Thr Ala Val Val Thr Thr Phe Ser Ala Gly Thr Phe Lys Leu
1145 1150 1155

Pro Arg Cys Thr Pro Gly Asp Arg Gln Trp Leu Tyr Val Gln Ser
1160 1165 1170

Ser Val Gly Asn Ile Val Gln Ser Cys Asn Pro Arg Tyr Ser Ile
1175 1180 1185

Phe Phe Asp Tyr Met Ala Ile His Arg Ser Leu Thr Lys Ile Trp
1190 1195 1200

Glu Asp Leu Gly Gly Pro Ser Gln Ala Pro Leu Pro Cys Val Leu
1205 1210 1215

Trp Pro Val Leu Pro Glu Pro Leu Pro Gln Gly Gln Leu Thr Ala
1220 1225 1230

Tyr His Val Ser Thr Ala Pro Thr Gly Ser Trp Phe Ser Ala Pro
1235 1240 1245

Gln Pro Ala Pro Glu Asn Ala Tyr Gln Ala Tyr Ala Ala Pro Gln
1250 1255 1260

Leu Phe Pro Val Ser Asp Ile
1265 1270

<210> 27
<211> 3810
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 27
atgagacctg ctccctggac acctaatacct cccaggtccc ccagccagat gagcgtgaga 60
gacagactgg ctaggctgag agccgaggct caggtcaagc aggccagcgt cgaggtgcaa 120
ccccctcagc tcaccaggt gtccccccag cagcctgtgg ccggcattct gttcattctg 180
gccattctga ccgagtgggg aagcggcaac agaacctacg gccctgtctt catgtgcctc 240
ggaggactgc tgacaatggt ggctggcgcc gtgtggctca ccgtcatgtc caacaccctg 300
ctcagcgcct ggattctgac cgccggattc ctgatctttc tgatcggatt cgctctcttt 360
ggcgtcatca ggtgttgcag gtactgttgc tactactgcc tgaccctcga gagcgaggaa 420

agacccccca cccctacag gaatacagtg aggaaacctc agcagcccga gagcctcgag	480
gagtgcgata gcgagctgga gattaaaagg tataagaata ggggtggcctc caggaagtgt	540
agggctaaat tcaaacagct cctgcaacac tataggaag tggccgccgc caagtccagc	600
gagattaggg acagaaggag gaatcctgcc tccaggagag accaggccaa atggagactc	660
caaacactcg ccgctggatg gcccatgggc taccaggcct atagctcctg gatgtacagc	720
tacaccgacc atcagacaac acccaccttc gtgcatctgc aggctacact gggctgcacc	780
ggaggcagaa ggtgtcacgt gtttctggga atcgtgctgt tcatctttgg atgcctgctc	840
gtgctgggca tctggattta tctcctggag atgctctgga gactcggcgc tacaatttgg	900
cagctgctcg ctttttttct ggccttcttt ctggacctga tcctcctgat catcgccctg	960
tacctccaac agaactgggtg gaccctcctg gtggatctgc tgtggctcct cctcttcctg	1020
gccatcctga tctggatgta ctaccatggc cagagaggaa gggtcgcttg cgctcctgtc	1080
cctgctcctg ctggcccat cgtgaggcct tgggagcctt ccctcacaca ggccgccggc	1140
caggcctttg ctcccgtgag gccccagcac atgcctgtgg aaccctgtcc cgtccccaca	1200
gtggctctgg aaaggcctgt gtacccaag cccgtgagac ctgtcctctg gctcagcagc	1260
cctggaggac tcggaacact cggagccgct ctctgacac tggccgctgc tctggctctg	1320
ctggctagcc tgatcctggg aaccctcaac ctcaccacca tgtttctcct catgctcctg	1380
tggaccctcg tgggtgctgt catctgttcc agctgctcca gctgccccct gagcaagatc	1440
ctgctggcca ggctgttcct gtacgccctc gccctcctgc tgctggctag cgccctgatc	1500
gctggcgga gcatcctcca gaccaatttc aagagcctct cctccaccga gttcatcccc	1560
aacctgttct gtatgttact gctgatccat agcgacgagc accatcatga cgactccctg	1620
ccccatctc agcaggccac agacgactcc ggccacgaga gcgacagcaa tagcaatgag	1680
ggcaggcacc atctgctcgt gtccggagct caagtccccg agcctccac catccatctc	1740
gccgcccagg gaatggctta cccctccac gagcagcacg gcatggcccc ttgtcccgtc	1800
gctcaagccc cccctacacc tctgcccttt ttgccattt gtctgacctg gagaatcgag	1860
gacccccct tcaacagcct gctgttcgcc ctgctcgccg ccgctggcgg cctccagggc	1920
atttacgtcc tcgtgatgct ggtgctgctg atcctcgctt acaggagaag atggaggaga	1980
ctgacagtgt gcggcggcat catgtttctc gcctgcgtcc tggctcctgat cgtggacgcc	2040

gtcctgcaac tcagccccct cctgggagct gtgacagtgg tctccatgac cctgctgctg	2100
ctggccttca acggacccca cgatcctctg cccaagatc ctgacaatac cgacgataac	2160
ggcccccaag accccgataa caccgacgac aatggccctc acgaccctct gccccatagc	2220
ccttccgata gcgctggcaa cgatggcggc cctcctcagc tgacagagga ggtggaaaat	2280
aagggcggcg atcagggacc ccccctgatg acagatggcg gaggaggaca cagccatgat	2340
agcggacatg gcggaggcga tccccatctg cctaccctcc tcctgggcag ctccggttct	2400
ggaggcgacg atgatgacct tcacggccct gtgcagctct cctactacga cggcaaaagg	2460
accgaacaag gaaaagaggt cctggagaag gccaggggca gcacatacgg aacccccagg	2520
cctccccatgt ccgattggac cggaggagcc ctgctggtcc tctacagctt cgccctgatg	2580
ctgatcatta tcatcctgat catctttatc ttcagaaggg acctgctgtg ccctctcggc	2640
gccctgtgca tcctgctgct catgatcaca ctctcctga tcgccctctg gaacctgcac	2700
ggacaagccc tgatgtccga tgagggacct ggaacaggac ccggaaacgg actgggcgag	2760
aagggagata caagcggccc cgaaggcagc ggcggaagcg gaccccaaag aaggggcggc	2820
gacaaccacg gaagaggaag aggcaggggc agaggcagag gaggaggaag acctggagcc	2880
cctggcggtt ctggaagcgg acccaggcac agggacggag tgaggaggcc tcaaaaaaga	2940
cccagctgca tcggctgcaa gggaaccac tggattgatg ataaccctc cacagagacc	3000
gctcaggcct ggaacgccgg cttcctgagg ggaagagcct atggcatcga tctgctgagg	3060
accgagggcg aacacgtgga gggagccacc ggagagacaa gggaggaaag cgaagacaca	3120
gaaagcgatg gcgacgacga agacctgccc tgcatttgtt ccaggggcgg acccaaggtg	3180
aagaggcccc ctatctttat cagaaggctc catagactgc tcctgatgag ggccatgaac	3240
cctgtgtgcc tgcccgtgat cgtggccccc tacctctttt ggctggccgc cattgccgct	3300
agctgcttca ccgcctccgt gtccacagtg gtgacagcca ccggcctcgc cctgagcctg	3360
ctgctcctcg ctgccgtggc ctccagctac gccgctgctc aaagaaagct cctgaccctt	3420
gtcaccgtcc tgacagccgt cgtgaccacc ttttccgctg gcaccttcaa gctgcctagg	3480
tgcacacctg gcgacaggca gtggctctac gtgcagagct ccgtgggcaa tattgtgcag	3540
agctgcaatc ccaggtacag cttttttttc gactacatgg ccatccatag gtccctcacc	3600
aagatctggg aggatctggg aggcccttcc caggctcctc tgccctgcgt gctgtggcct	3660

gtgctgcctg agcctctgcc ccaaggccag ctgacagcct atcacgtgtc caccgctcct 3720
acaggttctt ggttcagcgc tccccagccc gctcccgaaa acgcttacca ggcttacgcc 3780
gccccccagc tgttccccgt ctccgacatc 3810

<210> 28
<211> 355
<212> PRT
<213> Callitrichine gammaherpesvirus 3

<400> 28
Met Ala Pro Arg Arg Arg Leu Ser Gly Pro Pro Trp Leu Thr Val Leu
1 5 10 15

Leu Leu Leu Ser Thr Leu Ser Val Ala Ala Leu Leu Ile Leu Phe Leu
20 25 30

Ile Phe Ser Ala Gly Ala Thr Ile Ser Thr Glu Ala Ser Leu Leu Val
35 40 45

Leu Leu Leu Leu Phe Val Thr Leu Leu Leu Pro Leu Leu Ser Ser Asn
50 55 60

Gly Leu Gln Leu Pro Ala Ala Leu Ile Leu Ile Gln Cys Phe Leu Leu
65 70 75 80

Ala Ala Asp Tyr Leu Ala Tyr Leu Ile Leu Pro Thr Ile Ser Glu Asp
85 90 95

Phe Leu Ile Leu Ile Ala Ile Leu Val Ile Val Ile Leu Val Gly Thr
100 105 110

Ile Thr Thr Leu Val Gly Ala Ile Gly Gly Ile Arg Ala Arg Arg Ser
115 120 125

Phe Leu Phe Ile Cys Ile Phe Phe Leu Phe Leu Ser Leu Phe Leu Thr
130 135 140

Ile Leu Ala Leu Leu Leu Gly Phe Ser Trp Leu Leu Leu Val Ala Ile
145 150 155 160

Leu Phe Trp Val Leu Trp Leu Val Ile Leu Ile Leu Leu Leu Leu Val
165 170 175

Tyr Pro Ile Pro His His Pro Leu Pro Thr Ser Leu Arg Phe Arg Met
180 185 190

Lys Gln Arg Val Ser Ser Asp Pro Thr Gly Ser Asp Arg Ser Pro Gln
195 200 205

Gly Ser His Asn Ser Leu Asn Ser Pro Asp Glu Glu Asp Pro Lys Asp
210 215 220

Asp Thr Lys Gln Pro Leu Cys Asn Met Thr Gln Gly Gly Pro Pro Val
225 230 235 240

Asn Gly Gln Leu Leu Gly Gln His Ala Gln Cys Pro Pro His Tyr Pro
245 250 255

Cys Cys His Ile Gln His Pro Asp Gly Glu Asp Ser Asp Gly Asp Asp
260 265 270

Gly Lys Ser Trp Gly Asp Ala Gly Glu Glu Asp Asn Gly Pro Asn Asp
275 280 285

Pro Asn Thr Asn Asn Gly Asn Glu Gly Gly Glu Gly Asp Asp Tyr Lys
290 295 300

Ser Trp Arg Lys Pro Glu Glu Glu Asp Asn Gly Pro Asn Asp Pro Asn
305 310 315 320

Thr Asn Asn Arg Ile Glu Asp Gly Asp Gly Asp Asp Gly Lys Ser Trp
325 330 335

Arg Asn Pro Glu Glu Glu Asp Asn Arg Lys Gln Asp Arg Leu Gly Thr
340 345 350

Lys Pro Phe
355

<210> 29

<211> 93

<212> PRT

<213> Callitrichine gammaherpesvirus 3

<400> 29

Met Ala Pro Arg Arg Arg Leu Ser Gly Pro Pro Trp Leu Thr Val Leu
1 5 10 15

Leu Leu Leu Ser Thr Leu Ser Val Ala Ala Leu Leu Ile Leu Phe Leu
20 25 30

Ile Phe Ser Ala Gly Ala Thr Ile Ser Thr Glu Ala Ser Leu Leu Val
35 40 45

Leu Leu Leu Leu Phe Val Thr Leu Leu Leu Pro Leu Leu Ser Ser Asn
50 55 60

Gly Leu Gln Leu Pro Ala Ala Leu Ile Leu Ile Gln Cys Phe Leu Leu
65 70 75 80

Ala Ala Asp Tyr Leu Ala Tyr Leu Ile Leu Pro Thr Ile
85 90

<210> 30

<211> 198

<212> PRT

<213> Callitrichine gammaherpesvirus 3

<400> 30

Ser Glu Asp Phe Leu Ile Leu Ile Ala Ile Leu Val Ile Val Ile Leu
1 5 10 15

Val Gly Thr Ile Thr Thr Leu Val Gly Ala Ile Gly Gly Ile Arg Ala
20 25 30

Arg Arg Ser Phe Leu Phe Ile Cys Ile Phe Phe Leu Phe Leu Ser Leu
35 40 45

Phe Leu Thr Ile Leu Ala Leu Leu Leu Gly Phe Ser Trp Leu Leu Leu
50 55 60

Val Ala Ile Leu Phe Trp Val Leu Trp Leu Val Ile Leu Ile Leu Leu
65 70 75 80

Leu Leu Val Tyr Pro Ile Pro His His Pro Leu Pro Thr Ser Leu Arg
85 90 95

Phe Arg Met Lys Gln Arg Val Ser Ser Asp Pro Thr Gly Ser Asp Arg
100 105 110

Ser Pro Gln Gly Ser His Asn Ser Leu Asn Ser Pro Asp Glu Glu Asp
115 120 125

Pro Lys Asp Asp Thr Lys Gln Pro Leu Cys Asn Met Thr Gln Gly Gly
130 135 140

Pro Pro Val Asn Gly Gln Leu Leu Gly Gln His Ala Gln Cys Pro Pro
145 150 155 160

His Tyr Pro Cys Cys His Ile Gln His Pro Asp Gly Glu Asp Ser Asp
165 170 175

Gly Asp Asp Gly Lys Ser Trp Gly Asp Ala Gly Glu Glu Asp Asn Gly
180 185 190

Pro Asn Asp Pro Asn Thr
195

<210> 31

<211> 64

<212> PRT

<213> Callitrichine gammaherpesvirus 3

<400> 31

Asn Asn Gly Asn Glu Gly Gly Glu Gly Asp Asp Tyr Lys Ser Trp Arg
1 5 10 15

Lys Pro Glu Glu Glu Asp Asn Gly Pro Asn Asp Pro Asn Thr Asn Asn
20 25 30

Arg Ile Glu Asp Gly Asp Gly Asp Asp Gly Lys Ser Trp Arg Asn Pro
35 40 45

Glu Glu Glu Asp Asn Arg Lys Gln Asp Arg Leu Gly Thr Lys Pro Phe
50 55 60

<210> 32
<211> 413
<212> PRT
<213> Callitrichine gammaherpesvirus 3

<400> 32

Met Ala Gly His Trp Tyr Glu Ser Val Ile Pro Gly Leu Phe Leu Cys
1 5 10 15

Pro Leu Ile Leu Pro Ser Leu Phe Trp Ile Cys Ser Leu Leu Thr Phe
 20 25 30

Leu Val Gly His Gly Ala Asn Ile Val Ser Ala Val Leu Phe Leu Val
 35 40 45

Leu Ala Trp Cys Leu Leu Ile Ala Asn Trp Asn Val Thr Arg Glu Asp
 50 55 60

Phe Val Ser Gly Arg Arg Ser Ser Met Ser Ser Leu Ser Val Ala Ala
65 70 75 80

Ser Thr Ala Thr Ala Met Phe Ala Ser Phe Leu Thr Leu Ser Phe Asp
 85 90 95

Gly Leu Gly Leu Leu Leu Phe Gly Thr Ala Leu Val Ile Gln Thr Ile
 100 105 110

Tyr Val Leu Tyr Leu Val Val Met Glu Ile Thr Val Trp Ile Met Met
 115 120 125

Phe Arg Tyr Leu His Phe Trp Ile Thr Leu Leu Phe Leu Leu Ser Pro
 130 135 140

Ile Ile Leu Ser Val Ala Cys Leu Ile Ile Gln Ser Ser Ala Leu Leu
145 150 155 160

Ile Glu Ala Val Val Val Thr Thr Ile Thr Val Leu Ala Ile Phe Leu
 165 170 175

Trp Leu Pro Pro Gln Gly Ala Glu Ala Asp Leu Gly Thr Ala Leu Leu
 180 185 190

Ile Leu Asn Thr Ala Leu Cys Leu Val Val Leu Ile Leu Thr Ala Ile
195 200 205

Pro Thr Asp Ala Gln Ile Leu Thr Val Phe Cys Leu Phe Cys Gln Trp
210 215 220

Thr Leu Phe Ile Cys Leu Gly Ile Arg Met Ile Cys Asn Trp Arg Gly
225 230 235 240

Lys Leu Thr Arg Ile Ile Cys Leu Lys Phe Cys Leu Tyr Gly Leu Ile
245 250 255

Ser Ala Ser Leu Ser Phe Gly Trp Tyr Ala Phe Leu Lys Glu Val Thr
260 265 270

Leu Pro Thr Thr Ala Thr Val Asp Pro Arg Gln Leu Pro Leu Phe Leu
275 280 285

Phe Ile Leu Ser Ser Val Leu Val Ile Leu Ala Ile Met Met Glu Phe
290 295 300

Gln Thr Ser Ser Ser Leu Phe Ala Ala Leu Phe Val Ile Ile Ala Gly
305 310 315 320

Met Leu Cys Val Thr Val Gly Val Ile Phe Leu Leu Ala Gly Val Lys
325 330 335

Pro Leu Leu Ser Gly Met Ile Cys Ala Ser Gly Ile Thr Met Leu Val
340 345 350

Leu Gly Val Val Leu Leu Val Val Cys Thr Arg Ala Ser Thr Arg Glu
355 360 365

Ser Ile Tyr Glu Asp Leu Arg Tyr Pro Thr Arg Asp Ala Asn Gly Glu
370 375 380

Tyr Glu Asn Val Gly Tyr Pro Pro Arg Asp Gly Asp Ala Pro His Arg
385 390 395 400

Leu Gly Glu Pro Val Tyr Asp Asp Val Glu Gln Ala Thr
405 410

<210> 33
<211> 210
<212> PRT
<213> Callitrichine gammaherpesvirus 3

<400> 33
Met Ala Gly His Trp Tyr Glu Ser Val Ile Pro Gly Leu Phe Leu Cys
1 5 10 15

Pro Leu Ile Leu Pro Ser Leu Phe Trp Ile Cys Ser Leu Leu Thr Phe
20 25 30

Leu Val Gly His Gly Ala Asn Ile Val Ser Ala Val Leu Phe Leu Val
35 40 45

Leu Ala Trp Cys Leu Leu Ile Ala Asn Trp Asn Val Thr Arg Glu Asp
50 55 60

Phe Val Ser Gly Arg Arg Ser Ser Met Ser Ser Leu Ser Val Ala Ala
65 70 75 80

Ser Thr Ala Thr Ala Met Phe Ala Ser Phe Leu Thr Leu Ser Phe Asp
85 90 95

Gly Leu Gly Leu Leu Leu Phe Gly Thr Ala Leu Val Ile Gln Thr Ile
100 105 110

Tyr Val Leu Tyr Leu Val Val Met Glu Ile Thr Val Trp Ile Met Met
115 120 125

Phe Arg Tyr Leu His Phe Trp Ile Thr Leu Leu Phe Leu Leu Ser Pro
130 135 140

Ile Ile Leu Ser Val Ala Cys Leu Ile Ile Gln Ser Ser Ala Leu Leu
145 150 155 160

Ile Glu Ala Val Val Val Thr Thr Ile Thr Val Leu Ala Ile Phe Leu
165 170 175

Trp Leu Pro Pro Gln Gly Ala Glu Ala Asp Leu Gly Thr Ala Leu Leu
180 185 190

Ile Leu Asn Thr Ala Leu Cys Leu Val Val Leu Ile Leu Thr Ala Ile
195 200 205

Pro Thr
210

<210> 34
<211> 153
<212> PRT
<213> Callitrichine gammaherpesvirus 3

<400> 34
Asp Ala Gln Ile Leu Thr Val Phe Cys Leu Phe Cys Gln Trp Thr Leu
1 5 10 15

Phe Ile Cys Leu Gly Ile Arg Met Ile Cys Asn Trp Arg Gly Lys Leu
20 25 30

Thr Arg Ile Ile Cys Leu Lys Phe Cys Leu Tyr Gly Leu Ile Ser Ala
35 40 45

Ser Leu Ser Phe Gly Trp Tyr Ala Phe Leu Lys Glu Val Thr Leu Pro
50 55 60

Thr Thr Ala Thr Val Asp Pro Arg Gln Leu Pro Leu Phe Leu Phe Ile
65 70 75 80

Leu Ser Ser Val Leu Val Ile Leu Ala Ile Met Met Glu Phe Gln Thr
85 90 95

Ser Ser Ser Leu Phe Ala Ala Leu Phe Val Ile Ile Ala Gly Met Leu
100 105 110

Cys Val Thr Val Gly Val Ile Phe Leu Leu Ala Gly Val Lys Pro Leu
115 120 125

Leu Ser Gly Met Ile Cys Ala Ser Gly Ile Thr Met Leu Val Leu Gly
130 135 140

Val Val Leu Leu Val Val Cys Thr Arg
145 150

<210> 35
<211> 50
<212> PRT
<213> Callitrichine gammaherpesvirus 3

<400> 35
Ala Ser Thr Arg Glu Ser Ile Tyr Glu Asp Leu Arg Tyr Pro Thr Arg
1 5 10 15

Asp Ala Asn Gly Glu Tyr Glu Asn Val Gly Tyr Pro Pro Arg Asp Gly
20 25 30

Asp Ala Pro His Arg Leu Gly Glu Pro Val Tyr Asp Asp Val Glu Gln
35 40 45

Ala Thr
50

<210> 36
<211> 327
<212> PRT
<213> Callitrichine gammaherpesvirus 3

<400> 36
Met Pro Arg Gly Arg Ser Thr Gly Arg Lys Gly Arg Asp Thr Glu Lys
1 5 10 15

Glu Arg Ser Arg Ser Pro Leu Arg Ala Pro Gly Gly Ser Asp Gly Pro
20 25 30

Ser Thr Arg Ala Gly Cys Gly Ala Gly Pro Cys Gln Leu Ser Ser Pro
35 40 45

Ile Ala Gly Gly Ser Arg Gly Gly Arg Gly Gly Arg Gly Gly Arg Gly
50 55 60

Gly Ser Arg Gly Arg Gly Ala Ser Arg Gly Arg Gly Gly Arg Gly Gly
65 70 75 80

Arg Gly Gly Arg Gly Gly Arg Gly Gly Arg Gly Gly Arg Gly Arg
85 90 95

Gly Ser Pro Gly Asp Asp Ser Pro Ser Pro Cys His His Arg Asp Glu
100 105 110

Pro Pro Ser Arg Ser Pro Ser Pro Gln Pro Thr Val Ser Glu Gln Ser
115 120 125

Gln Gln Ser Pro Arg Gln Gln Ser Pro Gln Gly Thr Ser Gln Gly Ser
130 135 140

Thr Arg Pro Gln Val Pro Gly Gly Ala Thr Thr Arg Lys Arg Gly Gly
145 150 155 160

Val Arg Gly Gln Pro Ala Lys Cys His Gly Lys Tyr Thr Thr Thr Ala
165 170 175

Glu Gly Leu Thr Ala Leu Leu Asn Arg Arg His Ser Pro Arg Thr Ser
180 185 190

Asn Glu Gly Arg Trp Met Asn Gly Val Met Ala Val Asn Leu Ser Lys
195 200 205

Trp Pro Leu Tyr Ser Leu Arg Arg Ala Leu Ala Leu Ala Ala Asn Glu
210 215 220

Val Arg Ile Ser Pro Leu Phe Arg Leu Pro Tyr Gly Ser Ala Phe Gly
225 230 235 240

Pro Gly Pro Gln Pro Gly Pro Ile Leu Glu Ser Ser Thr Trp Gly Phe
245 250 255

Leu Val Phe Thr Gln Thr Ser Leu Phe Ala Asp Asp Ile Ala Asp Ala
260 265 270

Ile Arg Asp Tyr Cys Thr Thr His Pro Gly Pro Thr Arg Asn Thr Gln
275 280 285

Val Val Leu Met Asn Phe Glu Gly Ser Gly Val Pro Leu Pro Met Phe
290 295 300

Phe Pro Pro Gly Glu Glu Thr Glu Glu Gln Arg Glu Gly Asp Arg Ala
305 310 315 320

Ser Asp Ser Asp Glu Ser Glu
325

<210> 37
<211> 51
<212> PRT
<213> Callitrichine gammaherpesvirus 3

<400> 37
Met Pro Arg Gly Arg Ser Thr Gly Arg Lys Gly Arg Asp Thr Glu Lys
1 5 10 15

Glu Arg Ser Arg Ser Pro Leu Arg Ala Pro Gly Gly Ser Asp Gly Pro
20 25 30

Ser Thr Arg Ala Gly Cys Gly Ala Gly Pro Cys Gln Leu Ser Ser Pro
35 40 45

Ile Ala Gly
50

<210> 38
<211> 119
<212> PRT
<213> Callitrichine gammaherpesvirus 3

<400> 38
Ser Pro Ser Pro Cys His His Arg Asp Glu Pro Pro Ser Arg Ser Pro
1 5 10 15

Ser Pro Gln Pro Thr Val Ser Glu Gln Ser Gln Gln Ser Pro Arg Gln
20 25 30

Gln Ser Pro Gln Gly Thr Ser Gln Gly Ser Thr Arg Pro Gln Val Pro
35 40 45

Gly Gly Ala Thr Thr Arg Lys Arg Gly Gly Val Arg Gly Gln Pro Ala
50 55 60

Lys Cys His Gly Lys Tyr Thr Thr Thr Ala Glu Gly Leu Thr Ala Leu
65 70 75 80

Leu Asn Arg Arg His Ser Pro Arg Thr Ser Asn Glu Gly Arg Trp Met
85 90 95

Asn Gly Val Met Ala Val Asn Leu Ser Lys Trp Pro Leu Tyr Ser Leu
100 105 110

Arg Arg Ala Leu Ala Leu Ala
115

<210> 39

<211> 106

<212> PRT

<213> Callitrichine gammaherpesvirus 3

<400> 39

Ala Asn Glu Val Arg Ile Ser Pro Leu Phe Arg Leu Pro Tyr Gly Ser
1 5 10 15

Ala Phe Gly Pro Gly Pro Gln Pro Gly Pro Ile Leu Glu Ser Ser Thr
20 25 30

Trp Gly Phe Leu Val Phe Thr Gln Thr Ser Leu Phe Ala Asp Asp Ile
35 40 45

Ala Asp Ala Ile Arg Asp Tyr Cys Thr Thr His Pro Gly Pro Thr Arg
50 55 60

Asn Thr Gln Val Val Leu Met Asn Phe Glu Gly Ser Gly Val Pro Leu
65 70 75 80

Pro Met Phe Phe Pro Pro Gly Glu Glu Thr Glu Glu Gln Arg Glu Gly
85 90 95

Asp Arg Ala Ser Asp Ser Asp Glu Ser Glu
100 105

<210> 40

<211> 252

<212> PRT

<213> Callitrichine gammaherpesvirus 3

<400> 40

Met Asp Leu Asp Gly Thr Gly Gly Gly Glu Gly Tyr Ser Gln Met Val
1 5 10 15

Pro Ile Ala Thr Ala Pro Gly Ser Gly His Ala Ala Thr Tyr Gln Asp
20 25 30

Leu Gln Ala Ala Pro Tyr Ile Ile Trp Pro Leu Gln Thr Asp Cys Gln
35 40 45

Pro Val Ala Thr Thr Phe Ala Ser Pro Gly Gln Ile Gln Trp Tyr Thr
50 55 60

Ser Ala Val Pro Gln Pro Thr Glu His Cys Ser Gln Phe Thr Asn Ala
65 70 75 80

Pro Thr Val Asn Gln Gln Gln Pro Ile Ser Gln Pro Gln Pro Glu Asn
85 90 95

Pro Pro Ala Phe Thr Phe Thr Gln Pro Ala Ser Ile Ile Pro Gly Val
100 105 110

Ile Ser Ala Ser Asn Leu Asn Val Ser Ala Ser Pro Ile Ile Pro Ser
115 120 125

Asp His Val Leu Pro Ile Ile Thr Ser Val Thr Ser Leu Ala Gln Pro
130 135 140

Asn Asn Asp Glu His Ala Ile Ser Ala Ser His His Ala Ser Asp Gly
145 150 155 160

Ser Val Asn Gln Gln Lys Glu Asn Gln Pro Gln Thr Leu Glu Glu Cys
165 170 175

Lys Thr Asp Gln Glu Arg Lys Arg Tyr Arg Asn Arg Leu Ala Ser Arg
180 185 190

Arg Cys Arg Ala Lys Phe Arg Asn Gln Leu Glu His Phe Arg Thr Val
195 200 205

Ala Ala Ala Lys Thr Glu Glu Asn Asn Arg Leu Arg Val Leu Ile Arg
210 215 220

Gln Met Cys Pro Thr Leu Asp Val Glu Ser Ile Val Pro Ser Thr Ser
225 230 235 240

Ala Gly Tyr His Glu Pro Leu Asn His Leu Thr His
245 250

<210> 41

<211> 146

<212> PRT

<213> Callitrichine gammaherpesvirus 3

<400> 41

Met Asp Leu Asp Gly Thr Gly Gly Gly Glu Gly Tyr Ser Gln Met Val
1 5 10 15

Pro Ile Ala Thr Ala Pro Gly Ser Gly His Ala Ala Thr Tyr Gln Asp
20 25 30

Leu Gln Ala Ala Pro Tyr Ile Ile Trp Pro Leu Gln Thr Asp Cys Gln
35 40 45

Pro Val Ala Thr Thr Phe Ala Ser Pro Gly Gln Ile Gln Trp Tyr Thr
50 55 60

Ser Ala Val Pro Gln Pro Thr Glu His Cys Ser Gln Phe Thr Asn Ala
65 70 75 80

Pro Thr Val Asn Gln Gln Gln Pro Ile Ser Gln Pro Gln Pro Glu Asn
85 90 95

Pro Pro Ala Phe Thr Phe Thr Gln Pro Ala Ser Ile Ile Pro Gly Val
100 105 110

Ile Ser Ala Ser Asn Leu Asn Val Ser Ala Ser Pro Ile Ile Pro Ser
115 120 125

Asp His Val Leu Pro Ile Ile Thr Ser Val Thr Ser Leu Ala Gln Pro
130 135 140

Asn Asn
145

<210> 42
<211> 106
<212> PRT
<213> Callitrichine gammaherpesvirus 3

<400> 42
Asp Glu His Ala Ile Ser Ala Ser His His Ala Ser Asp Gly Ser Val
1 5 10 15

Asn Gln Gln Lys Glu Asn Gln Pro Gln Thr Leu Glu Glu Cys Lys Thr
20 25 30

Asp Gln Glu Arg Lys Arg Tyr Arg Asn Arg Leu Ala Ser Arg Arg Cys
35 40 45

Arg Ala Lys Phe Arg Asn Gln Leu Glu His Phe Arg Thr Val Ala Ala
50 55 60

Ala Lys Thr Glu Glu Asn Asn Arg Leu Arg Val Leu Ile Arg Gln Met
65 70 75 80

Cys Pro Thr Leu Asp Val Glu Ser Ile Val Pro Ser Thr Ser Ala Gly
85 90 95

Tyr His Glu Pro Leu Asn His Leu Thr His
100 105

<210> 43
<211> 216
<212> PRT
<213> Callithrix jacchus

<400> 43
Met Asp Asp Gln Arg Asp Leu Ile Ser Asn Asn Glu Gln Leu Pro Met
1 5 10 15

Leu Gly Gln Arg Pro Gly Ala Pro Glu Ser Lys Cys Ser Arg Gly Ala
20 25 30

Val Tyr Thr Val Phe Ser Ile Leu Val Ala Leu Leu Leu Ala Gly Gln
35 40 45

Ala Thr Thr Ala Tyr Phe Leu Tyr Gln Gln Gln Gly Arg Leu Asp Lys
50 55 60

Leu Thr Val Thr Ser Gln Asn Leu Gln Leu Glu Asn Leu Arg Met Lys
65 70 75 80

Leu Pro Lys Pro Ala Lys Pro Leu Ser Gln Met Arg Met Ala Thr Pro
85 90 95

Leu Leu Met Gln Ala Leu Pro Met Ala Gly Leu Pro Gln Lys Pro Met
100 105 110

Gln Asn Ala Thr Lys His Gly Asn Met Thr Glu Asp His Val Met His
115 120 125

Leu Leu Leu Asn Ala Asp Pro Leu Lys Val Tyr Pro Pro Leu Lys Gly
130 135 140

Ser Leu Ser Glu Asn Leu Lys His Leu Lys Asn Thr Met Glu Thr Met
145 150 155 160

Asp Trp Lys Val Phe Glu Ser Trp Leu His His Trp Leu Leu Phe Glu
165 170 175

Met Ser Lys His Ser Leu Glu Gln Lys Pro Thr Glu Ala Pro Pro Lys
180 185 190

Glu Ser Leu Glu Leu Glu Asp Pro Ser Ser Gly Leu Gly Val Thr Lys
195 200 205

Gln Asp Leu Gly Pro Val Ala Met
210 215

<210> 44

<211> 1045

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 44

Met Ser Glu Asp Phe Leu Ile Leu Ile Ala Ile Leu Val Ile Val Ile

1	5	10	15
Leu Val Gly Thr Ile Thr Thr Leu Val Gly Ala Ile Gly Gly Ile Arg	20	25	30
Ala Arg Arg Ser Phe Leu Phe Ile Cys Ile Phe Phe Leu Phe Leu Ser	35	40	45
Leu Phe Leu Thr Ile Leu Ala Leu Leu Leu Gly Phe Ser Trp Leu Leu	50	55	60
Leu Val Ala Ile Leu Phe Trp Val Leu Trp Leu Val Ile Leu Ile Leu	65	70	75
Leu Leu Leu Val Tyr Pro Ile Pro His His Pro Leu Pro Thr Ser Leu	85	90	95
Arg Phe Arg Met Lys Gln Arg Val Ser Ser Asp Pro Thr Gly Ser Asp	100	105	110
Arg Ser Pro Gln Gly Ser His Asn Ser Leu Asn Ser Pro Asp Glu Glu	115	120	125
Asp Pro Lys Asp Asp Thr Lys Gln Pro Leu Cys Asn Met Thr Gln Gly	130	135	140
Gly Pro Pro Val Asn Gly Gln Leu Leu Gly Gln His Ala Gln Cys Pro	145	150	155
Pro His Tyr Pro Cys Cys His Ile Gln His Pro Asp Gly Glu Asp Ser	165	170	175
Asp Gly Asp Asp Gly Lys Ser Trp Gly Asp Ala Gly Glu Glu Asp Asn	180	185	190
Gly Pro Asn Asp Pro Asn Thr Ala Ser Thr Arg Glu Ser Ile Tyr Glu	195	200	205
Asp Leu Arg Tyr Pro Thr Arg Asp Ala Asn Gly Glu Tyr Glu Asn Val	210	215	220

Gly Tyr Pro Pro Arg Asp Gly Asp Ala Pro His Arg Leu Gly Glu Pro
225 230 235 240

Val Tyr Asp Asp Val Glu Gln Ala Thr Ala Asn Glu Val Arg Ile Ser
245 250 255

Pro Leu Phe Arg Leu Pro Tyr Gly Ser Ala Phe Gly Pro Gly Pro Gln
260 265 270

Pro Gly Pro Ile Leu Glu Ser Ser Thr Trp Gly Phe Leu Val Phe Thr
275 280 285

Gln Thr Ser Leu Phe Ala Asp Asp Ile Ala Asp Ala Ile Arg Asp Tyr
290 295 300

Cys Thr Thr His Pro Gly Pro Thr Arg Asn Thr Gln Val Val Leu Met
305 310 315 320

Asn Phe Glu Gly Ser Gly Val Pro Leu Pro Met Phe Phe Pro Pro Gly
325 330 335

Glu Glu Thr Glu Glu Gln Arg Glu Gly Asp Arg Ala Ser Asp Ser Asp
340 345 350

Glu Ser Glu Asp Ala Gln Ile Leu Thr Val Phe Cys Leu Phe Cys Gln
355 360 365

Trp Thr Leu Phe Ile Cys Leu Gly Ile Arg Met Ile Cys Asn Trp Arg
370 375 380

Gly Lys Leu Thr Arg Ile Ile Cys Leu Lys Phe Cys Leu Tyr Gly Leu
385 390 395 400

Ile Ser Ala Ser Leu Ser Phe Gly Trp Tyr Ala Phe Leu Lys Glu Val
405 410 415

Thr Leu Pro Thr Thr Ala Thr Val Asp Pro Arg Gln Leu Pro Leu Phe
420 425 430

Leu Phe Ile Leu Ser Ser Val Leu Val Ile Leu Ala Ile Met Met Glu

435

440

445

Phe Gln Thr Ser Ser Ser Leu Phe Ala Ala Leu Phe Val Ile Ile Ala
 450 455 460

Gly Met Leu Cys Val Thr Val Gly Val Ile Phe Leu Leu Ala Gly Val
 465 470 475 480

Lys Pro Leu Leu Ser Gly Met Ile Cys Ala Ser Gly Ile Thr Met Leu
 485 490 495

Val Leu Gly Val Val Leu Leu Val Val Cys Thr Arg Ser Pro Ser Pro
 500 505 510

Cys His His Arg Asp Glu Pro Pro Ser Arg Ser Pro Ser Pro Gln Pro
 515 520 525

Thr Val Ser Glu Gln Ser Gln Gln Ser Pro Arg Gln Gln Ser Pro Gln
 530 535 540

Gly Thr Ser Gln Gly Ser Thr Arg Pro Gln Val Pro Gly Gly Ala Thr
 545 550 555 560

Thr Arg Lys Arg Gly Gly Val Arg Gly Gln Pro Ala Lys Cys His Gly
 565 570 575

Lys Tyr Thr Thr Thr Ala Glu Gly Leu Thr Ala Leu Leu Asn Arg Arg
 580 585 590

His Ser Pro Arg Thr Ser Asn Glu Gly Arg Trp Met Asn Gly Val Met
 595 600 605

Ala Val Asn Leu Ser Lys Trp Pro Leu Tyr Ser Leu Arg Arg Ala Leu
 610 615 620

Ala Leu Ala Met Ala Pro Arg Arg Arg Leu Ser Gly Pro Pro Trp Leu
 625 630 635 640

Thr Val Leu Leu Leu Leu Ser Thr Leu Ser Val Ala Ala Leu Leu Ile
 645 650 655

Leu Phe Leu Ile Phe Ser Ala Gly Ala Thr Ile Ser Thr Glu Ala Ser
660 665 670

Leu Leu Val Leu Leu Leu Leu Phe Val Thr Leu Leu Leu Pro Leu Leu
675 680 685

Ser Ser Asn Gly Leu Gln Leu Pro Ala Ala Leu Ile Leu Ile Gln Cys
690 695 700

Phe Leu Leu Ala Ala Asp Tyr Leu Ala Tyr Leu Ile Leu Pro Thr Ile
705 710 715 720

Met Pro Arg Gly Arg Ser Thr Gly Arg Lys Gly Arg Asp Thr Glu Lys
725 730 735

Glu Arg Ser Arg Ser Pro Leu Arg Ala Pro Gly Gly Ser Asp Gly Pro
740 745 750

Ser Thr Arg Ala Gly Cys Gly Ala Gly Pro Cys Gln Leu Ser Ser Pro
755 760 765

Ile Ala Gly Asn Asn Gly Asn Glu Gly Gly Glu Gly Asp Asp Tyr Lys
770 775 780

Ser Trp Arg Lys Pro Glu Glu Glu Asp Asn Gly Pro Asn Asp Pro Asn
785 790 795 800

Thr Asn Asn Arg Ile Glu Asp Gly Asp Gly Asp Asp Gly Lys Ser Trp
805 810 815

Arg Asn Pro Glu Glu Glu Asp Asn Arg Lys Gln Asp Arg Leu Gly Thr
820 825 830

Lys Pro Phe Met Ala Gly His Trp Tyr Glu Ser Val Ile Pro Gly Leu
835 840 845

Phe Leu Cys Pro Leu Ile Leu Pro Ser Leu Phe Trp Ile Cys Ser Leu
850 855 860

Leu Thr Phe Leu Val Gly His Gly Ala Asn Ile Val Ser Ala Val Leu

865		870		875		880									
Phe	Leu	Val	Leu	Ala	Trp	Cys	Leu	Leu	Ile	Ala	Asn	Trp	Asn	Val	Thr
				885					890					895	
Arg	Glu	Asp	Phe	Val	Ser	Gly	Arg	Arg	Ser	Ser	Met	Ser	Ser	Leu	Ser
			900					905						910	
Val	Ala	Ala	Ser	Thr	Ala	Thr	Ala	Met	Phe	Ala	Ser	Phe	Leu	Thr	Leu
		915					920					925			
Ser	Phe	Asp	Gly	Leu	Gly	Leu	Leu	Leu	Phe	Gly	Thr	Ala	Leu	Val	Ile
	930					935					940				
Gln	Thr	Ile	Tyr	Val	Leu	Tyr	Leu	Val	Val	Met	Glu	Ile	Thr	Val	Trp
945					950					955					960
Ile	Met	Met	Phe	Arg	Tyr	Leu	His	Phe	Trp	Ile	Thr	Leu	Leu	Phe	Leu
				965					970					975	
Leu	Ser	Pro	Ile	Ile	Leu	Ser	Val	Ala	Cys	Leu	Ile	Ile	Gln	Ser	Ser
			980					985					990		
Ala	Leu	Leu	Ile	Glu	Ala	Val	Val	Val	Thr	Thr	Ile	Thr	Val	Leu	Ala
		995					1000					1005			
Ile	Phe	Leu	Trp	Leu	Pro	Pro	Gln	Gly	Ala	Glu	Ala	Asp	Leu	Gly	
	1010					1015					1020				
Thr	Ala	Leu	Leu	Ile	Leu	Asn	Thr	Ala	Leu	Cys	Leu	Val	Val	Leu	
	1025					1030					1035				
Ile	Leu	Thr	Ala	Ile	Pro	Thr									
	1040					1045									

<210> 45
 <211> 3135
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 45

atgtccgagg actttctgat tctgatcgcc atcctgggtga tctgtattct cgtgggcaca	60
atcacaaccc tgggtgggcgc catcggcggc attagggcca ggaggagctt cctcttcatt	120
tgcatcttct tcctgttcct ctccctcttc ctgacaatcc tcgccctgct gctgggcttc	180
agctggctcc tgctgggtggc catcctgttc tgggtgctct ggctggtcac ctcattctg	240
ctgctgctgg tgtaccctat tcctcaccac cccctgcca cctccctcag gtttagaatg	300
aagcagaggg tgagcagcga cccacaggt tctgacagaa gccctcaggg cagccataat	360
agcctgaact ccccgatga ggaggacccc aaggatgaca ccaagcaacc tctgtgcaac	420
atgaccagg gcggacctcc cgtcaatgga cagctcctcg gacaacatgc tcaatgcccc	480
cctcactatc cctgctgcca tattcagcat cccgacggag aggattccga tggagacgat	540
ggcaagtcct ggggcgatgc cggagaggaa gacaatggcc ctaacgacct taacaccgcc	600
agcaccagag agtccattta cgaggacctc agatacccca caaggagcgc caatggcgag	660
tatgagaacg tgggataccc ccctagggac ggagatgccc ctcataggct cggagagcct	720
gtgtatgacg atgtggagca agccaccgct aacgaggtga gaatctcccc tctgttcaga	780
ctgccctacg gaagcgcttt cggacctggc cccagcctg gaccattct ggagagctcc	840
acatggggct ttctggtctt cacacagacc tccctgttcg ccgacgacat tgccgacgct	900
attagggact actgcacaac ccacctggc cccacaagga acaccaggt ggtcctcatg	960
aacttcgagg gcagcggagt gcccctgcct atgttttttc cccctggaga ggagacagaa	1020
gagcagagag agggcgatag agctagcgac tccgacgagt ccgaagacgc tcagatcctg	1080
accgtgttct gcctgttttg ccagtggaca ctctttatct gcctgggaat caggatgac	1140
tgtaactgga ggggcaaact caccaggatc atctgcctga agttctgcct ctacggactg	1200
atttccgcct ccctgtcctt cggctggtac gcttttctga aggaagtgc cctccccacc	1260
acagccaccg ttgatcctag gcaactcccc ctgttctctt tcacctgag ctccgtgctg	1320
tgatttctcg ccatcatgat ggagtttcaa acatcctcca gcctcttcgc tgctctgttc	1380
tgattatcg ccggaatgct gtgcgtcaca gtgggcgtga tttttctgct ggctggcgctc	1440
aagcctctcc tgagcggcat gatctgcgcc tccggcatca caatgctcgt gctcggcgctc	1500

gtgctgctgg	tggtgtgcac	cagaagcccc	agcccttgtc	atcacaggga	tgaaccccc	1560
tccagaagcc	ccagccctca	accaccgtc	tccgagcagt	cccagcagtc	ccccaggcag	1620
cagagccctc	aaggcacatc	ccagggttct	acaagacctc	aggtgcctgg	aggcgccacc	1680
accagaaaaa	gaggcggcgt	gagaggccaa	cctgccaaagt	gtcacggcaa	gtacaccaca	1740
accgccgagg	gactgaccgc	tctcctgaat	aggaggcaca	gccccaggac	atccaacgag	1800
ggcaggtgga	tgaatggagt	catggctgtg	aacctctcca	aatggcccct	gtacagcctg	1860
aggagagccc	tggccctcgc	catggctcct	agaaggaggc	tctccggccc	tccctggctg	1920
acagtgtgtc	tgctgtgtc	cacactgagc	gtggccgccc	tgctgattct	cttcctgatt	1980
ttcagcgccg	gcgccaccat	tagcacagaa	gccagcctgc	tggtcctgct	cctgctgttt	2040
gtgaccctgc	tgctgcctct	cctgtcctcc	aacggactcc	agctccctgc	cgccctgatt	2100
ctgatccagt	gtttcctcct	ggccgctgat	tatctcgcct	acctgattct	gcctaccatt	2160
atgcccgagg	gcagaagcac	aggaaggaag	ggcagggaca	cagagaaaga	gaggagcaga	2220
tccccctctca	gagctcctgg	cggttctgat	ggaccagca	caagggtgg	ctgtggagcc	2280
ggaccctgtc	agctgagcag	ccccatcgcc	ggaaacaacg	gcaatgaagg	cggcgagggc	2340
gacgactaca	agagctggag	gaagcccgag	gaagaggaca	acggcccca	tgaccccaat	2400
accaacaaca	ggattgagga	tggagacggc	gacgacggaa	aatcctggag	gaatcctgag	2460
gaggaggata	acagaaagca	ggacaggctg	ggcaccaagc	ctttcatggc	cggccactgg	2520
tatgagagcg	tgattcccgg	cctgttcctc	tgccccctga	tcctcccttc	cctgttctgg	2580
atttgctccc	tgctgacctt	cctgggtggc	cacggagcca	atattgtgag	cgccgtcctg	2640
ttcctcgtgc	tggcttggtg	tctcctcatt	gccaaactgga	acgtgacaag	agaggacttc	2700
gtgtccggca	ggagaagctc	catgagcagc	ctgtccgtgg	ccgcttccac	cgccacagcc	2760
atgttcgcca	gcttcctcac	cctgagcttt	gatggcctgg	gcctgctgct	gtttggcacc	2820
gccctggtga	tccagacaat	ttacgtgctg	tatctggtgg	tcattggagat	caccgtgtgg	2880
atcatgatgt	ttaggtatct	ccacttttgg	atcacctgc	tgttcctgct	gagccccatt	2940
attctctccg	tcgcctgtct	catcatccaa	tcctccgccc	tgctgatcga	ggctgtggtc	3000
gtcaccacca	tcacagtcct	ggccattttt	ctgtggctcc	ctcctcaagg	cgctgaggcc	3060
gatctcggca	ccgccctgct	gattctgaat	accgccctgt	gcctggtcgt	gctgatcctg	3120

accgctatcc ctaca

3135

<210> 46

<211> 1270

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 46

Met Arg Pro Ala Pro Trp Thr Pro Asn Pro Pro Arg Ser Pro Ser Gln
1 5 10 15

Met Ser Val Arg Asp Arg Leu Ala Arg Leu Arg Ala Glu Ala Gln Val
20 25 30

Lys Gln Ala Ser Val Glu Val Gln Pro Pro Gln Leu Thr Gln Val Ser
35 40 45

Pro Gln Gln Pro Val Ala Gly Ile Leu Phe Ile Leu Ala Ile Leu Thr
50 55 60

Glu Trp Gly Ser Gly Asn Arg Thr Tyr Gly Pro Val Phe Met Cys Leu
65 70 75 80

Gly Gly Leu Leu Thr Met Val Ala Gly Ala Val Trp Leu Thr Val Met
85 90 95

Ser Asn Thr Leu Leu Ser Ala Trp Ile Leu Thr Ala Gly Phe Leu Ile
100 105 110

Phe Leu Ile Gly Phe Ala Leu Phe Gly Val Ile Arg Cys Cys Arg Tyr
115 120 125

Cys Cys Tyr Tyr Cys Leu Thr Leu Glu Ser Glu Glu Arg Pro Pro Thr
130 135 140

Pro Tyr Arg Asn Thr Val Arg Lys Pro Gln Gln Pro Glu Ser Leu Glu
145 150 155 160

Glu Cys Asp Ser Glu Leu Glu Ile Lys Arg Tyr Lys Asn Arg Val Ala
165 170 175

Ser Arg Lys Cys Arg Ala Lys Phe Lys Gln Leu Leu Gln His Tyr Arg
180 185 190

Glu Val Ala Ala Ala Lys Ser Ser Glu Ile Arg Asp Arg Arg Arg Asn
195 200 205

Pro Ala Ser Arg Arg Asp Gln Ala Lys Trp Arg Leu Gln Thr Leu Ala
210 215 220

Ala Gly Trp Pro Met Gly Tyr Gln Ala Tyr Ser Ser Trp Met Tyr Ser
225 230 235 240

Tyr Thr Asp His Gln Thr Thr Pro Thr Phe Val His Leu Gln Ala Thr
245 250 255

Leu Gly Cys Thr Gly Gly Arg Arg Cys His Val Phe Leu Gly Ile Val
260 265 270

Leu Phe Ile Phe Gly Cys Leu Leu Val Leu Gly Ile Trp Ile Tyr Leu
275 280 285

Leu Glu Met Leu Trp Arg Leu Gly Ala Thr Ile Trp Gln Leu Leu Ala
290 295 300

Phe Phe Leu Ala Phe Phe Leu Asp Leu Ile Leu Leu Ile Ile Ala Leu
305 310 315 320

Tyr Leu Gln Gln Asn Trp Trp Thr Leu Leu Val Asp Leu Leu Trp Leu
325 330 335

Leu Leu Phe Leu Ala Ile Leu Ile Trp Met Tyr Tyr His Gly Gln Arg
340 345 350

Gly Arg Val Ala Cys Ala Pro Val Pro Ala Pro Ala Gly Pro Ile Val
355 360 365

Arg Pro Trp Glu Pro Ser Leu Thr Gln Ala Ala Gly Gln Ala Phe Ala
370 375 380

Pro Val Arg Pro Gln His Met Pro Val Glu Pro Val Pro Val Pro Thr
385 390 395 400

Val Ala Leu Glu Arg Pro Val Tyr Pro Lys Pro Val Arg Pro Val Leu
405 410 415

Trp Leu Ser Ser Pro Gly Gly Leu Gly Thr Leu Gly Ala Ala Leu Leu
420 425 430

Thr Leu Ala Ala Ala Leu Ala Leu Leu Ala Ser Leu Ile Leu Gly Thr
435 440 445

Leu Asn Leu Thr Thr Met Phe Leu Leu Met Leu Leu Trp Thr Leu Val
450 455 460

Val Leu Leu Ile Cys Ser Ser Cys Ser Ser Cys Pro Leu Ser Lys Ile
465 470 475 480

Leu Leu Ala Arg Leu Phe Leu Tyr Ala Leu Ala Leu Leu Leu Leu Ala
485 490 495

Ser Ala Leu Ile Ala Gly Gly Ser Ile Leu Gln Thr Asn Phe Lys Ser
500 505 510

Leu Ser Ser Thr Glu Phe Ile Pro Asn Leu Phe Cys Met Leu Leu Leu
515 520 525

Ile His Ser Asp Glu His His His Asp Asp Ser Leu Pro His Pro Gln
530 535 540

Gln Ala Thr Asp Asp Ser Gly His Glu Ser Asp Ser Asn Ser Asn Glu
545 550 555 560

Gly Arg His His Leu Leu Val Ser Gly Ala Gln Val Pro Glu Pro Pro
565 570 575

Thr Ile His Leu Ala Ala Gln Gly Met Ala Tyr Pro Leu His Glu Gln
580 585 590

His Gly Met Ala Pro Cys Pro Val Ala Gln Ala Pro Pro Thr Pro Leu
595 600 605

Pro Phe Phe Ala Ile Cys Leu Thr Trp Arg Ile Glu Asp Pro Pro Phe
610 615 620

Asn Ser Leu Leu Phe Ala Leu Leu Ala Ala Ala Gly Gly Leu Gln Gly
625 630 635 640

Ile Tyr Val Leu Val Met Leu Val Leu Leu Ile Leu Ala Tyr Arg Arg
645 650 655

Arg Trp Arg Arg Leu Thr Val Cys Gly Gly Ile Met Phe Leu Ala Cys
660 665 670

Val Leu Val Leu Ile Val Asp Ala Val Leu Gln Leu Ser Pro Leu Leu
675 680 685

Gly Ala Val Thr Val Val Ser Met Thr Leu Leu Leu Leu Ala Phe Asn
690 695 700

Gly Pro His Asp Pro Leu Pro Gln Asp Pro Asp Asn Thr Asp Asp Asn
705 710 715 720

Gly Pro Gln Asp Pro Asp Asn Thr Asp Asp Asn Gly Pro His Asp Pro
725 730 735

Leu Pro His Ser Pro Ser Asp Ser Ala Gly Asn Asp Gly Gly Pro Pro
740 745 750

Gln Leu Thr Glu Glu Val Glu Asn Lys Gly Gly Asp Gln Gly Pro Pro
755 760 765

Leu Met Thr Asp Gly Gly Gly Gly His Ser His Asp Ser Gly His Gly
770 775 780

Gly Gly Asp Pro His Leu Pro Thr Leu Leu Leu Gly Ser Ser Gly Ser
785 790 795 800

Gly Gly Asp Asp Asp Pro His Gly Pro Val Gln Leu Ser Tyr Tyr
805 810 815

Asp Gly Lys Arg Thr Glu Gln Gly Lys Glu Val Leu Glu Lys Ala Arg
820 825 830

Gly Ser Thr Tyr Gly Thr Pro Arg Pro Pro Met Ser Asp Trp Thr Gly
835 840 845

Gly Ala Leu Leu Val Leu Tyr Ser Phe Ala Leu Met Leu Ile Ile Ile
850 855 860

Ile Leu Ile Ile Phe Ile Phe Arg Arg Asp Leu Leu Cys Pro Leu Gly
865 870 875 880

Ala Leu Cys Ile Leu Leu Leu Met Ile Thr Leu Leu Leu Ile Ala Leu
885 890 895

Trp Asn Leu His Gly Gln Ala Leu Met Ser Asp Glu Gly Pro Gly Thr
900 905 910

Gly Pro Gly Asn Gly Leu Gly Glu Lys Gly Asp Thr Ser Gly Pro Glu
915 920 925

Gly Ser Gly Gly Ser Gly Pro Gln Arg Arg Gly Gly Asp Asn His Gly
930 935 940

Arg Gly Arg Gly Arg Gly Arg Gly Arg Gly Gly Arg Pro Gly Ala
945 950 955 960

Pro Gly Gly Ser Gly Ser Gly Pro Arg His Arg Asp Gly Val Arg Arg
965 970 975

Pro Gln Lys Arg Pro Ser Cys Ile Gly Cys Lys Gly Thr His Trp Ile
980 985 990

Asp Asp Asn Pro Ser Thr Glu Thr Ala Gln Ala Trp Asn Ala Gly Phe
995 1000 1005

Leu Arg Gly Arg Ala Tyr Gly Ile Asp Leu Leu Arg Thr Glu Gly
1010 1015 1020

Glu His Val Glu Gly Ala Thr Gly Glu Thr Arg Glu Glu Ser Glu
1025 1030 1035

Asp Thr Glu Ser Asp Gly Asp Asp Glu Asp Leu Pro Cys Ile Val
1040 1045 1050

Ser Arg Gly Gly Pro Lys Val Lys Arg Pro Pro Ile Phe Ile Arg
1055 1060 1065

Arg Leu His Arg Leu Leu Leu Met Arg Ala Met Asn Pro Val Cys
1070 1075 1080

Leu Pro Val Ile Val Ala Pro Tyr Leu Phe Trp Leu Ala Ala Ile
1085 1090 1095

Ala Ala Ser Cys Phe Thr Ala Ser Val Ser Thr Val Val Thr Ala
1100 1105 1110

Thr Gly Leu Ala Leu Ser Leu Leu Leu Leu Ala Ala Val Ala Ser
1115 1120 1125

Ser Tyr Ala Ala Ala Gln Arg Lys Leu Leu Thr Pro Val Thr Val
1130 1135 1140

Leu Thr Ala Val Val Thr Thr Phe Ser Ala Gly Thr Phe Lys Leu
1145 1150 1155

Pro Arg Cys Thr Pro Gly Asp Arg Gln Trp Leu Tyr Val Gln Ser
1160 1165 1170

Ser Val Gly Asn Ile Val Gln Ser Cys Asn Pro Arg Tyr Ser Ile
1175 1180 1185

Phe Phe Asp Tyr Met Ala Ile His Arg Ser Leu Thr Lys Ile Trp
1190 1195 1200

Glu Asp Leu Gly Gly Pro Ser Gln Ala Pro Leu Pro Cys Val Leu
1205 1210 1215

Trp Pro Val Leu Pro Glu Pro Leu Pro Gln Gly Gln Leu Thr Ala
1220 1225 1230

Tyr His Val Ser Thr Ala Pro Thr Gly Ser Trp Phe Ser Ala Pro
1235 1240 1245

Gln Pro Ala Pro Glu Asn Ala Tyr Gln Ala Tyr Ala Ala Pro Gln
1250 1255 1260

Leu Phe Pro Val Ser Asp Ile
1265 1270

<210> 47
<211> 3810
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 47
atgagacctg ctccctggac acctaatacct cccaggtccc ccagccagat gagcgtgaga 60
gacagactgg ctaggctgag agccgaggct caggtcaagc aggccagcgt cgaggtgcaa 120
ccccctcagc tcacccaggt gtccccccag cagcctgtgg ccggcattct gttcattctg 180
gccattctga ccgagtgggg aagcggcaac agaacctacg gccctgtctt catgtgcctc 240
ggaggactgc tgacaatggt ggctggcgcc gtgtggctca ccgtcatgtc caacaccctg 300
ctcagcgcct ggattctgac cgccggattc ctgatctttc tgatcggatt cgctctcttt 360
ggcgtcatca ggtgttgag gtactgttg tactactgcc tgaccctcga gagcgaggaa 420
agacccccca cccctacag gaatacagt aggaaacctc agcagcccga gaggctcgag 480
gagtgcgata gcgagctgga gattaaaagg tataagaata ggggtggcctc caggaagtgt 540
agggctaaat tcaaacagct cctgcaacac tatagggaag tggccgccgc caagtccagc 600
gagattaggg acagaaggag gaatcctgcc tccaggagag accaggccaa atggagactc 660
caaacactcg ccgctggatg gcccatgggc taccaggcct atagctcctg gatgtacagc 720
tacaccgacc atcagacaac acccaccttc gtgcatctgc aggctacact gggctgcacc 780
ggaggcagaa ggtgtcacgt gtttctggga atcgtgctgt tcattcttgg atgcctgctc 840
gtgctgggca tctggattta tctcctggag atgctctgga gactcggcgc tacaatttgg 900

cagctgctcg ccttttttct ggccttcttt ctggacctga tcctcctgat catcgccctg	960
tacctccaac agaactgggtg gaccctcctg gtggatctgc tgtggctcct cctcttcctg	1020
gccatcctga tctggatgta ctaccatggc cagagaggaa gggtcgcttg cgctcctgtc	1080
cctgctcctg ctggcccat cgtgaggcct tgggagcctt ccctcacaca ggccgccggc	1140
caggcctttg ctcccgtgag gccccagcac atgcctgtgg aaccctgtcc cgtccccaca	1200
gtggctctgg aaaggcctgt gtacccaag cccgtgagac ctgtcctctg gctcagcagc	1260
cctggaggac tcggaacact cggagccgct ctcctgacac tggccgctgc tctggctctg	1320
ctggctagcc tgatcctggg aaccctcaac ctcaccacca tgtttctcct catgctcctg	1380
tggaccctcg tggctgtgct catctgttcc agctgctcca gctgccccct gagcaagatc	1440
ctgctggcca ggctgttcct gtacgccctc gccctcctgc tgctggctag cgccctgatc	1500
gctggcgga gcatcctcca gaccaatttc aagagcctct cctccaccga gttcatcccc	1560
aacctgttct gtatgttact gctgatccat agcgacgagc accatcatga cgactccctg	1620
ccccatctc agcaggccac agacgactcc ggccacgaga gcgacagcaa tagcaatgag	1680
ggcaggcacc atctgctcgt gtccggagct caagtccccg agcctccac catccatctc	1740
gccgcccagg gaatggctta cccctccac gagcagcacg gcatggcccc ttgtcccgtc	1800
gctcaagccc cccctacacc tctgcccttt ttgccattt gtctgacctg gagaatcgag	1860
gacccccct tcaacagcct gctgttcgcc ctgctcgccg ccgctggcgg cctccagggc	1920
atttacgtcc tcgtgatgct ggtgctgctg atcctcgctt acaggagaag atggaggaga	1980
ctgacagtgt gcggcggcat catgtttctc gcctgcgtcc tggctcctgat cgtggacgcc	2040
gtcctgcaac tcagccccct cctgggagct gtgacagtgg tctccatgac cctgctgctg	2100
ctggccttca acggacccca cgatcctctg cccaagatc ctgacaatac cgacgataac	2160
ggcccccaag accccgataa caccgacgac aatggccctc acgaccctct gccccatagc	2220
ccttccgata gcgctggcaa cgatggcggc cctcctcagc tgacagagga ggtggaaaat	2280
aaggcgggcg atcagggacc cccctgatg acagatggcg gaggaggaca cagccatgat	2340
agcggacatg gcggaggcga tccccatctg cctaccctcc tcctgggcag ctccggttct	2400
ggaggcgacg atgatgacct tcacggccct gtgcagctct cctactacga cggcaaaagg	2460
accgaacaag gaaaagaggt cctggagaag gccaggggca gcacatacgg aacccccagg	2520

cctcccatgt ccgattggac cggaggagcc ctgctggtcc tctacagctt cgccctgatg	2580
ctgatcatta tcatcctgat catctttatc ttcagaaggg acctgctgtg ccctctcggc	2640
gccctgtgca tcctgctgct catgatcaca ctctcctga tcgccctctg gaacctgcac	2700
ggacaagccc tgatgtccga tgagggacct ggaacaggac ccggaaacgg actgggcgag	2760
aaggagata caagcggccc cgaaggcagc ggcggaagcg gaccccaaag aaggggcggc	2820
gacaaccacg gaagaggaag aggcaggggc agaggcagag gaggaggaag acctggagcc	2880
cctggcgggtt ctggaagcgg acccaggcac agggacggag tgaggaggcc tcaaaaaaga	2940
cccagctgca tcggctgcaa gggaaccac tggattgatg ataaccctc cacagagacc	3000
gctcaggcct ggaacgccgg cttcctgagg ggaagagcct atggcatcga tctgctgagg	3060
accgagggcg aacacgtgga gggagccacc ggagagacaa gggaggaaag cgaagacaca	3120
gaaagcgatg gcgacgacga agacctgccc tgcatttgtt ccaggggcgg acccaaggtg	3180
aagaggcccc ctatctttat cagaaggctc catagactgc tcctgatgag ggccatgaac	3240
cctgtgtgcc tgcccgtgat cgtggcccc tacctctttt ggctggccgc cattgccgct	3300
agctgcttca ccgcctccgt gtccacagtg gtgacagcca ccggcctcgc cctgagcctg	3360
ctgctcctcg ctgccgtggc ctccagctac gccgctgctc aaagaaagct cctgaccctt	3420
gtcaccgtcc tgacagccgt cgtgaccacc ttttccgctg gcaccttcaa gctgcctagg	3480
tgcacacctg gcgacaggca gtggctctac gtgcagagct ccgtgggcaa tattgtgcag	3540
agctgcaatc ccaggtacag cttttttttc gactacatgg ccatccatag gtccctcacc	3600
aagatctggg aggatctggg aggcccttcc caggctcctc tgccctgcgt gctgtggcct	3660
gtgctgcctg agcctctgcc ccaaggccag ctgacagcct atcacgtgtc caccgctcct	3720
acaggttctt ggttcagcgc tccccagccc gctcccgaaa acgcttacca ggcttacgcc	3780
gccccccagc tgttccccgt ctccgacatc	3810

<210> 48

<211> 1512

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic

polypeptide"

<400> 48

Met Asp Asp Gln Arg Asp Leu Ile Ser Asn Asn Glu Gln Leu Pro Met
1 5 10 15

Leu Gly Gln Arg Pro Gly Ala Pro Glu Ser Lys Cys Ser Arg Gly Ala
20 25 30

Val Tyr Thr Val Phe Ser Ile Leu Val Ala Leu Leu Leu Ala Gly Gln
35 40 45

Ala Thr Thr Ala Tyr Phe Leu Tyr Gln Gln Gln Gly Arg Leu Asp Lys
50 55 60

Leu Thr Val Thr Ser Gln Asn Leu Gln Leu Glu Asn Leu Arg Met Lys
65 70 75 80

Leu Pro Lys Pro Ala Lys Pro Leu Ser Gln Met Arg Met Ala Thr Pro
85 90 95

Leu Leu Met Gln Ala Leu Pro Met Ala Gly Leu Pro Gln Lys Pro Met
100 105 110

Gln Asn Ala Thr Lys His Gly Asn Met Thr Glu Asp His Val Met His
115 120 125

Leu Leu Leu Asn Ala Asp Pro Leu Lys Val Tyr Pro Pro Leu Lys Gly
130 135 140

Ser Leu Ser Glu Asn Leu Lys His Leu Lys Asn Thr Met Glu Thr Met
145 150 155 160

Asp Trp Lys Val Phe Glu Ser Trp Leu His His Trp Leu Leu Phe Glu
165 170 175

Met Ser Lys His Ser Leu Glu Gln Lys Pro Thr Glu Ala Pro Pro Lys
180 185 190

Glu Ser Leu Glu Leu Glu Asp Pro Ser Ser Gly Leu Gly Val Thr Lys
195 200 205

Gln Asp Leu Gly Pro Val Ala Met Ser Glu Asp Phe Leu Ile Leu Ile
210 215 220

Ala Ile Leu Val Ile Val Ile Leu Val Gly Thr Ile Thr Thr Leu Val
225 230 235 240

Gly Ala Ile Gly Gly Ile Arg Ala Arg Arg Ser Phe Leu Phe Ile Cys
245 250 255

Ile Phe Phe Leu Phe Leu Ser Leu Phe Leu Thr Ile Leu Ala Leu Leu
260 265 270

Leu Gly Phe Ser Trp Leu Leu Leu Val Ala Ile Leu Phe Trp Val Leu
275 280 285

Trp Leu Val Ile Leu Ile Leu Leu Leu Leu Val Tyr Pro Ile Pro His
290 295 300

His Pro Leu Pro Thr Ser Leu Arg Phe Arg Met Lys Gln Arg Val Ser
305 310 315 320

Ser Asp Pro Thr Gly Ser Asp Arg Ser Pro Gln Gly Ser His Asn Ser
325 330 335

Leu Asn Ser Pro Asp Glu Glu Asp Pro Lys Asp Asp Thr Lys Gln Pro
340 345 350

Leu Cys Asn Met Thr Gln Gly Gly Pro Pro Val Asn Gly Gln Leu Leu
355 360 365

Gly Gln His Ala Gln Cys Pro Pro His Tyr Pro Cys Cys His Ile Gln
370 375 380

His Pro Asp Gly Glu Asp Ser Asp Gly Asp Asp Gly Lys Ser Trp Gly
385 390 395 400

Asp Ala Gly Glu Glu Asp Asn Gly Pro Asn Asp Pro Asn Thr Ala Ser
405 410 415

Thr Arg Glu Ser Ile Tyr Glu Asp Leu Arg Tyr Pro Thr Arg Asp Ala

420

425

430

Asn Gly Glu Tyr Glu Asn Val Gly Tyr Pro Pro Arg Asp Gly Asp Ala
 435 440 445

Pro His Arg Leu Gly Glu Pro Val Tyr Asp Asp Val Glu Gln Ala Thr
 450 455 460

Ala Asn Glu Val Arg Ile Ser Pro Leu Phe Arg Leu Pro Tyr Gly Ser
 465 470 475 480

Ala Phe Gly Pro Gly Pro Gln Pro Gly Pro Ile Leu Glu Ser Ser Thr
 485 490 495

Trp Gly Phe Leu Val Phe Thr Gln Thr Ser Leu Phe Ala Asp Asp Ile
 500 505 510

Ala Asp Ala Ile Arg Asp Tyr Cys Thr Thr His Pro Gly Pro Thr Arg
 515 520 525

Asn Thr Gln Val Val Leu Met Asn Phe Glu Gly Ser Gly Val Pro Leu
 530 535 540

Pro Met Phe Phe Pro Pro Gly Glu Glu Thr Glu Glu Gln Arg Glu Gly
 545 550 555 560

Asp Arg Ala Ser Asp Ser Asp Glu Ser Glu Asp Ala Gln Ile Leu Thr
 565 570 575

Val Phe Cys Leu Phe Cys Gln Trp Thr Leu Phe Ile Cys Leu Gly Ile
 580 585 590

Arg Met Ile Cys Asn Trp Arg Gly Lys Leu Thr Arg Ile Ile Cys Leu
 595 600 605

Lys Phe Cys Leu Tyr Gly Leu Ile Ser Ala Ser Leu Ser Phe Gly Trp
 610 615 620

Tyr Ala Phe Leu Lys Glu Val Thr Leu Pro Thr Thr Ala Thr Val Asp
 625 630 635 640

Pro Arg Gln Leu Pro Leu Phe Leu Phe Ile Leu Ser Ser Val Leu Val
645 650 655

Ile Leu Ala Ile Met Met Glu Phe Gln Thr Ser Ser Ser Leu Phe Ala
660 665 670

Ala Leu Phe Val Ile Ile Ala Gly Met Leu Cys Val Thr Val Gly Val
675 680 685

Ile Phe Leu Leu Ala Gly Val Lys Pro Leu Leu Ser Gly Met Ile Cys
690 695 700

Ala Ser Gly Ile Thr Met Leu Val Leu Gly Val Val Leu Leu Val Val
705 710 715 720

Cys Thr Arg Asp Glu His Ala Ile Ser Ala Ser His His Ala Ser Asp
725 730 735

Gly Ser Val Asn Gln Gln Lys Glu Asn Gln Pro Gln Thr Leu Glu Glu
740 745 750

Cys Lys Thr Asp Gln Glu Arg Lys Arg Tyr Arg Asn Arg Leu Ala Ser
755 760 765

Arg Arg Cys Arg Ala Lys Phe Arg Asn Gln Leu Glu His Phe Arg Thr
770 775 780

Val Ala Ala Ala Lys Thr Glu Glu Asn Asn Arg Leu Arg Val Leu Ile
785 790 795 800

Arg Gln Met Cys Pro Thr Leu Asp Val Glu Ser Ile Val Pro Ser Thr
805 810 815

Ser Ala Gly Tyr His Glu Pro Leu Asn His Leu Thr His Ser Pro Ser
820 825 830

Pro Cys His His Arg Asp Glu Pro Pro Ser Arg Ser Pro Ser Pro Gln
835 840 845

Pro Thr Val Ser Glu Gln Ser Gln Gln Ser Pro Arg Gln Gln Ser Pro

850

855

860

Gln Gly Thr Ser Gln Gly Ser Thr Arg Pro Gln Val Pro Gly Gly Ala
 865 870 875 880

Thr Thr Arg Lys Arg Gly Gly Val Arg Gly Gln Pro Ala Lys Cys His
 885 890 895

Gly Lys Tyr Thr Thr Thr Ala Glu Gly Leu Thr Ala Leu Leu Asn Arg
 900 905 910

Arg His Ser Pro Arg Thr Ser Asn Glu Gly Arg Trp Met Asn Gly Val
 915 920 925

Met Ala Val Asn Leu Ser Lys Trp Pro Leu Tyr Ser Leu Arg Arg Ala
 930 935 940

Leu Ala Leu Ala Met Ala Pro Arg Arg Arg Leu Ser Gly Pro Pro Trp
 945 950 955 960

Leu Thr Val Leu Leu Leu Leu Ser Thr Leu Ser Val Ala Ala Leu Leu
 965 970 975

Ile Leu Phe Leu Ile Phe Ser Ala Gly Ala Thr Ile Ser Thr Glu Ala
 980 985 990

Ser Leu Leu Val Leu Leu Leu Leu Phe Val Thr Leu Leu Leu Pro Leu
 995 1000 1005

Leu Ser Ser Asn Gly Leu Gln Leu Pro Ala Ala Leu Ile Leu Ile
 1010 1015 1020

Gln Cys Phe Leu Leu Ala Ala Asp Tyr Leu Ala Tyr Leu Ile Leu
 1025 1030 1035

Pro Thr Ile Met Pro Arg Gly Arg Ser Thr Gly Arg Lys Gly Arg
 1040 1045 1050

Asp Thr Glu Lys Glu Arg Ser Arg Ser Pro Leu Arg Ala Pro Gly
 1055 1060 1065

Gly	Ser	Asp	Gly	Pro	Ser	Thr	Arg	Ala	Gly	Cys	Gly	Ala	Gly	Pro
1070						1075					1080			
Cys	Gln	Leu	Ser	Ser	Pro	Ile	Ala	Gly	Asn	Asn	Gly	Asn	Glu	Gly
1085						1090					1095			
Gly	Glu	Gly	Asp	Asp	Tyr	Lys	Ser	Trp	Arg	Lys	Pro	Glu	Glu	Glu
1100						1105					1110			
Asp	Asn	Gly	Pro	Asn	Asp	Pro	Asn	Thr	Asn	Asn	Arg	Ile	Glu	Asp
1115						1120					1125			
Gly	Asp	Gly	Asp	Asp	Gly	Lys	Ser	Trp	Arg	Asn	Pro	Glu	Glu	Glu
1130						1135					1140			
Asp	Asn	Arg	Lys	Gln	Asp	Arg	Leu	Gly	Thr	Lys	Pro	Phe	Met	Asp
1145						1150					1155			
Leu	Asp	Gly	Thr	Gly	Gly	Gly	Glu	Gly	Tyr	Ser	Gln	Met	Val	Pro
1160						1165					1170			
Ile	Ala	Thr	Ala	Pro	Gly	Ser	Gly	His	Ala	Ala	Thr	Tyr	Gln	Asp
1175						1180					1185			
Leu	Gln	Ala	Ala	Pro	Tyr	Ile	Ile	Trp	Pro	Leu	Gln	Thr	Asp	Cys
1190						1195					1200			
Gln	Pro	Val	Ala	Thr	Thr	Phe	Ala	Ser	Pro	Gly	Gln	Ile	Gln	Trp
1205						1210					1215			
Tyr	Thr	Ser	Ala	Val	Pro	Gln	Pro	Thr	Glu	His	Cys	Ser	Gln	Phe
1220						1225					1230			
Thr	Asn	Ala	Pro	Thr	Val	Asn	Gln	Gln	Gln	Pro	Ile	Ser	Gln	Pro
1235						1240					1245			
Gln	Pro	Glu	Asn	Pro	Pro	Ala	Phe	Thr	Phe	Thr	Gln	Pro	Ala	Ser
1250						1255					1260			
Ile	Ile	Pro	Gly	Val	Ile	Ser	Ala	Ser	Asn	Leu	Asn	Val	Ser	Ala

1265	1270	1275
Ser Pro Ile Ile Pro Ser Asp His Val Leu Pro Ile Ile Thr Ser 1280 1285 1290		
Val Thr Ser Leu Ala Gln Pro Asn Asn Met Ala Gly His Trp Tyr 1295 1300 1305		
Glu Ser Val Ile Pro Gly Leu Phe Leu Cys Pro Leu Ile Leu Pro 1310 1315 1320		
Ser Leu Phe Trp Ile Cys Ser Leu Leu Thr Phe Leu Val Gly His 1325 1330 1335		
Gly Ala Asn Ile Val Ser Ala Val Leu Phe Leu Val Leu Ala Trp 1340 1345 1350		
Cys Leu Leu Ile Ala Asn Trp Asn Val Thr Arg Glu Asp Phe Val 1355 1360 1365		
Ser Gly Arg Arg Ser Ser Met Ser Ser Leu Ser Val Ala Ala Ser 1370 1375 1380		
Thr Ala Thr Ala Met Phe Ala Ser Phe Leu Thr Leu Ser Phe Asp 1385 1390 1395		
Gly Leu Gly Leu Leu Leu Phe Gly Thr Ala Leu Val Ile Gln Thr 1400 1405 1410		
Ile Tyr Val Leu Tyr Leu Val Val Met Glu Ile Thr Val Trp Ile 1415 1420 1425		
Met Met Phe Arg Tyr Leu His Phe Trp Ile Thr Leu Leu Phe Leu 1430 1435 1440		
Leu Ser Pro Ile Ile Leu Ser Val Ala Cys Leu Ile Ile Gln Ser 1445 1450 1455		
Ser Ala Leu Leu Ile Glu Ala Val Val Val Thr Thr Ile Thr Val 1460 1465 1470		

Leu Ala Ile Phe Leu Trp Leu Pro Pro Gln Gly Ala Glu Ala Asp
1475 1480 1485

Leu Gly Thr Ala Leu Leu Ile Leu Asn Thr Ala Leu Cys Leu Val
1490 1495 1500

Val Leu Ile Leu Thr Ala Ile Pro Thr
1505 1510

<210> 49
<211> 4536
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 49
atggacgacc agcgggacct gatcagcaac aacgagcagc tgcccatgct gggccagagg 60
cctggcgccc ctgagagcaa gtgtagcaga ggcgccgtgt acaccgtgtt cagcatcctg 120
gtggccctgc tgctggccgg acaggccacc accgcctact ttctgtatca gcagcaggga 180
cggctggaca agctgaccgt gaccagccag aacctgcagc tggaaaacct gcggatgaag 240
ctgccaagc ccgccaagcc cctgagccag atgagaatgg ccacccccct gctgatgcag 300
gccctgccta tggccggcct gccccagaaa cccatgcaga acgccaccaa gcacggcaac 360
atgaccgagg accacgtgat gcatctgctg ctgaacgccg accccctgaa ggtgtacccc 420
ccactgaagg gcagcctgag cgagaacctg aagcacctga agaacaccat ggaaaccatg 480
gactggaagg tgttcgagag ctggctgcac cactggctgc tgttcgagat gagcaagcac 540
agcctggaac agaagcccac cgaggcccct cccaaagaga gcctggaact ggaagatccc 600
agcagcggcc tgggcgtgac caagcaggat ctgggccccg tggctatgtc cgaggacttt 660
ctgattctga tcgccatcct ggtgatcgtg attctcgtgg gcacaatcac aaccctggtg 720
ggcgccatcg gcggcattag ggccaggagg agcttcctct tcatttgcat cttcttcctg 780
ttcctctccc tcttcctgac aatcctcgcc ctgctgctgg gcttcagctg gctcctgctg 840
gtggccatcc tgttctgggt gctctggctg gtcacctca ttctgctgct gctggtgtac 900

cctattcctc accacccct gccacctcc ctcaggttta gaatgaagca gagggtgagc	960
agcgacccca caggttctga cagaagccct cagggcagcc ataatagcct gaactcccc	1020
gatgaggagg accccaagga tgacaccaag caacctctgt gcaacatgac ccagggcgga	1080
cctcccgta atggacagct cctcggacaa catgctcaat gccccctca ctatccctgc	1140
tgccatattc agcatcccga cggagaggat tccgatggag acgatggcaa gtcctggggc	1200
gatgccggag aggaagacaa tggccctaac gaccctaaca ccgccagcac cagagagtcc	1260
atttacgagg acctcagata cccacaagg gacgccaatg gcgagtatga gaacgtggga	1320
taccccccta gggacggaga tgcccctcat aggctcggag agcctgtgta tgacgatgtg	1380
gagcaagcca ccgctaacga ggtgagaatc tcccctctgt tcagactgcc ctacggaagc	1440
gctttcggac ctggcccca gcctggaccc attctggaga gctccacatg gggctttctg	1500
gtcttcacac agacctcct gttcgccgac gacattgccg acgctattag ggactactgc	1560
acaaccacc ctggcccccac aaggaacacc caggtggtcc tcatgaactt cgagggcagc	1620
ggagtgcctt tgcctatgtt ttttccccct ggagaggaga cagaagagca gagagagggc	1680
gatagagcta gcgactccga cgagtccgaa gacgctcaga tcctgaccgt gttctgcctg	1740
ttttgccagt ggacactctt tatctgcctg ggaatcagga tgatctgtaa ctggaggggc	1800
aaactcacca ggatcatctg cctgaagttc tgcctctacg gactgatttc cgcctccctg	1860
tccttcggct ggtacgcttt tctgaaggaa gtgaccctcc ccaccacagc caccgttgat	1920
cctaggcaac tccccctgtt cctcttcac ctagctccg tgctggtgat tctcgccatc	1980
atgatggagt ttcaaacatc ctccagcctc ttcgctgctc tgttcgtgat tatcgccgga	2040
atgctgtgcg tcacagtggg cgtgattttt ctgctggctg gcgtcaagcc tctcctgagc	2100
ggcatgatct gcgcctccgg catcacaatg ctcgtgctcg gcgtcgtgct gctggtggtg	2160
tgaccagag atgagcacgc tatttccgcc agccaccatg ctagcgatgg ctccgtgaat	2220
cagcagaagg aaaatcagcc ccagaccctg gaggaatgca agacagatca ggagaggaag	2280
aggtacagga acaggctggc ctccaggagg tgtagagcta agttcaggaa ccagctggaa	2340
catttttagga cagtcgccgc tgctaagaca gaggagaaca acaggctcag ggtgctcatc	2400
aggcagatgt gtcctacact ggacgtggaa tccatcgtcc cctccacctc cgccggctac	2460
cacgagcctc tgaatcacct gaccacagc ccagccctt gtcatcacag ggatgaaccc	2520

ccctccagaa gccccagccc tcaaccacc gtctccgagc agtcccagca gtccccagg	2580
cagcagagcc ctcaaggcac atcccagggt tctacaagac ctcagggtgcc tggaggcgcc	2640
accaccagaa aaagaggcgg cgtgagaggc caacctgcca agtgtcacgg caagtacacc	2700
acaaccgccg agggactgac cgctctcctg aataggaggc acagccccag gacatccaac	2760
gagggcaggt ggatgaatgg agtcatggct gtgaacctct ccaaatggcc cctgtacagc	2820
ctgaggagag ccctggccct cgccatggct cctagaagga ggctctccgg ccctccctgg	2880
ctgacagtgc tgctgctgct gtccacactg agcgtggccg ccctgctgat tctcttcctg	2940
attttcagcg ccggcgccac cattagcaca gaagccagcc tgctggctcct gtcctgctg	3000
tttgtgacct tgctgctgcc tctcctgtcc tccaacggac tccagctccc tgccgccctg	3060
attctgatcc agtgtttcct cctggccgct gattatctcg cctacctgat tctgcctacc	3120
attatgccc a ggggcagaag cacaggaagg aagggcaggg acacagagaa agagaggagc	3180
agatcccctc tcagagctcc tggcggttct gatggacca gcacaagggc tggctgtgga	3240
gccggaccct gtcagctgag cagccccatc gccggaaaca acggcaatga aggcggcgag	3300
ggcgacgact acaagagctg gaggaagccc gaggaagagg acaacggccc caatgacccc	3360
aataccaaca acaggattga ggatggagac ggcgacgacg gaaaatcctg gaggaatcct	3420
gaggaggagg ataacagaaa gcaggacagg ctgggcacca agcctttcat ggacctcgac	3480
ggaaccggcg gaggcgaggg ctacagccag atgggtcccta tcgccaccgc ccccggaagc	3540
ggccacgccg ctacctatca ggatctccag gccgcccctt acatcatctg gcctctccag	3600
accgattgcc agcctgtggc taccaccttc gcctcccccg gacagatcca gtggtataca	3660
agcgccgtcc cccagcccac agagcattgc tcccagttta caaacgctcc caccgtcaac	3720
cagcagcagc ctattagcca accccagccc gaaaatcccc ctgctttcac ctttaccag	3780
cccgcttcca tcattcccgg cgtcattagc gcctccaacc tgaacgtgag cgcttcccct	3840
atcatcccta gcgaccatgt cctccccatc attacctccg tgaccagcct cgcccaacct	3900
aataacatgg ccggccactg gtatgagagc gtgattcccc gcctgttcct ctgccccctg	3960
atcctccctt ccctgttctg gatttgctcc ctgctgacct tcctgggtggg ccacggagcc	4020
aatattgtga gcgccgtcct gttcctcgtg ctggcttggt gtctcctcat tgccaactgg	4080
aacgtgacaa gagaggactt cgtgtccggc aggagaagct ccatgagcag cctgtccgtg	4140

gccgcttcca ccgccacagc catgttcgcc agcttcctca ccctgagctt tgatggcctg	4200
ggcctgctgc tgtttggcac cgccctggtg atccagacaa tttacgtgct gtatctggtg	4260
gtcatggaga tcaccgtgtg gatcatgatg tttaggtatc tccacttttg gatcaccctg	4320
ctgttcctgc tgagcccat tattctctcc gtcgcctgtc tcatcatcca atcctccgcc	4380
ctgctgatcg aggctgtggt cgtcaccacc atcacagtcc tggccatttt tctgtggctc	4440
cctcctcaag gcgctgaggc cgatctcggc accgccctgc tgattctgaa taccgccctg	4500
tgcttggtcg tgctgatcct gaccgctatc cctaca	4536

<210> 50

<211> 44035

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<220>

<221> modified_base

<222> (15712)..(15712)

<223> a, c, t, g, unknown or other

<400> 50

catcatcaat aatatacctt attttggatt gaagccaata tgataatgag atgggcggcg	60
cggggcgggg cgcggggcgg gaggcgggtt tgggggcggg ccggcgggcg gggcgggtgtg	120
gcggaagtgg actttgtaag tgtggcggat gtgacttgct agtgccgggc gcggtaaaag	180
tgacgttttc cgtgcgcgac aacgccccg ggaagtgaca tttttccgc ggtttttacc	240
ggatgttgta gtgaatttgg gcgtaaccaa gtaagatttg gccattttcg cgggaaaact	300
gaaacgggga agtgaaatct gattaatttt gcgttagtca taccgcgtaa tatttgtcta	360
gggccgaggg actttggccg attacgtgga ggactcgccc aggtgttttt tgaggtgaat	420
ttccgcgttc cgggtcaaag tctgcgtttt attattatag gatatcccat tgcatacgtt	480
gtatccatat cataatatgt acatttatat tggctcatgt ccaacattac cgccatgttg	540
acattgatta ttgactagtt attaatagta atcaattacg gggtcattag ttcatagccc	600
atatatggag ttccgcgtta cataacttac ggtaaatggc ccgcctggct gaccgccc	660

cgacccccgc ccattgacgt caataatgac gtatgttccc atagtaacgc caatagggac	720
tttccattga cgtcaatggg tggagtatth acggtaaact gccacttgg cagtacatca	780
agtgtatcat atgccaagta cgccccctat tgacgtcaat gacggtaaht ggcccgctg	840
gcattatgcc cagtacatga ccttatggga ctttcctact tggcagtaca tctacgtatt	900
agtcatacgt attaccatgg tgatgcggtt ttggcagtac atcaatgggc gtggatagcg	960
gtttgactca cggggatttc caagtctcca cccattgac gtcaatggga gtttgttttg	1020
gcacaaaaat caacgggact ttccaaaatg tcgtaacaac tccgccccat tgacgcaaat	1080
gggcggtagg cgtgtacggt gggaggtcta tataagcaga gctctcccta tcagtgatag	1140
agatctccct atcagtgata gagatcgtcg acgagctcgt ttagtgaacc gtcagatcgc	1200
ctggagacgc catccacgct gttttgacct ccatagaaga caccgggacc gatccagcct	1260
ccgcggccgg gaacggtgca ttggaacgcg gattccccgt gccaaagagt agatcttccg	1320
tttatctagg taccagatat cgccaccatg agacctgctc cctggacacc taatcctccc	1380
aggtccccca gccagatgag cgtgagagac agactggcta ggctgagagc cgaggctcag	1440
gtcaagcagg ccagcgtcga ggtgcaaccc cctcagctca cccaggtgtc cccccagcag	1500
cctgtggccg gcattctggt cattctggcc attctgaccg agtggggaag cggcaacaga	1560
acctacggcc ctgtcttcat gtgcctcgga ggactgctga caatggtggc tggcgccgtg	1620
tggctcaccg tcatgtccaa caccctgctc agcgcctgga ttctgaccgc cggattcctg	1680
atctttctga tcggattcgc tctctttggc gtcatacagg gttgcaggta ctgttgctac	1740
tactgcctga ccctcgagag cgaggaaaga cccccaccc cctacaggaa tacagtgatt	1800
agggacagaa ggaggaatcc tgcctccagg agagaccagg ccaahtggag actccaaaca	1860
ctcgccgctg gatggcccat gggctaccag gcctatagct cctggatgta cagctacacc	1920
gaccatcaga caacaccac cttcgtgcat ctgcaggcta cactgggctg caccggaggc	1980
agaagggtgc acgtgtttct gggaatcgtg ctgttcatct ttggatgcct gctcgtgctg	2040
ggcatctgga tttatctcct ggagatgctc tggagactcg gcgctacaat ttggcagctg	2100
ctcgctttt ttctggcctt ctttctggac ctgatactcc tgatcatcgc cctgtacctc	2160
caacagaact ggtggaccct cctggtggat ctgctgtggc tcctcctctt cctggccatc	2220
ctgatctgga tgtactacca tggccagaga ggaagggtcg cttgcgctcc tgtccctgct	2280

cctgctggcc ccatcgtgag gccttgggag ctttccctca cacaggccgc cggccaggcc	2340
tttgctcccc tgaggcccca gcacatgcct gtggaacccg tgcccgtccc cacagtggct	2400
ctggaaaggc ctgtgtaccc caagcccgtg agacctgtcc tctggctcag cagccctgga	2460
ggactcggaa cactcggagc cgctctcctg acactggccg ctgctctggc tctgctggct	2520
agcctgatcc tgggaaccct caacctcacc accatgtttc tcctcatgct cctgtggacc	2580
ctcgtggtgc tgctcatctg ttccagctgc tccagctgcc ccctgagcaa gatcctgctg	2640
gccaggctgt tcctgtacgc cctcgccctc ctgctgctgg ctagcgccct gatcgctggc	2700
ggaagcatcc tccagaccaa tttcaagagc ctctcctcca ccgagttcat cccaacctg	2760
ttctgtatgt tactgctgat ccatagcgac gagcaccatc atgacgactc cctgccccat	2820
cctcagcagg ccacagacga ctccggccac gagagcgaca gcaatagcaa tgagggcagg	2880
caccatctgc tcgtgtccgg agctcaagtc cccgagcctc ccaccatcca tctcgccgcc	2940
cagggaatgg cttacccccct ccacgagcag cacggcatgg ccccttgtcc cgtcgctcaa	3000
gcccccccta cacctctgcc ctttttcgcc atttgtctga cctggagaat cgaggacccc	3060
cccttcaaca gcctgctgtt cgccctgctc gccgccgctg gcggcctcca gggcatttac	3120
gtcctcgtga tgctgggtgct gctgacctc gcttacagga gaagatggag gagactgaca	3180
gtgtgcggcg gcatcatgtt tctcgctgc gtcctggctc tgatcgtgga cgccgtcctg	3240
caactcagcc ccctcctggg agctgtgaca gtggtctcca tgaccctgct gctgctggcc	3300
ttcaacggac cccacgatcc tctgccccaa gatcctgaca ataccgacga taacggcccc	3360
caagaccccg ataacaccga cgacaatggc cctcacgacc ctctgcccca tagcccttcc	3420
gatagcgctg gcaacgatgg cggccctcct cagctgacag aggaggtgga aaataagggc	3480
ggcgatcagg gacccccct gatgacagat ggcgaggagg gacacagcca tgatagcgga	3540
catggcggag gcgatcccca tctgcctacc ctctcctgg gcagctccgg ttctggaggc	3600
gacgatgatg accctcacgg ccctgtgcag ctctcctact acgacggcaa aaggaccgaa	3660
caaggaaaag aggtcctgga gaaggccagg ggcagcacat acggaacccc caggcctccc	3720
atgtccgatt ggaccggagg agccctgctg gtcctctaca gcttcgccct gatgctgac	3780
attatcatcc tgatcatctt tatcttcaga aggacctgc tgtgccctct cggcgccctg	3840
tgcatcctgc tgctcatgat cacactcctc ctgatcgccc tctggaacct gcacggacaa	3900

gccctgatgt ccgatgaggg acctggaaca ggacccggaa acggactggg cgagaaggga	3960
gatacaagcg gccccgaagg cagcggcgga agcggacccc aaagaagggg cggcgacaac	4020
cacggaagag gaagaggcag gggcagaggc agaggaggag gaagacctgg agcccctggc	4080
ggttctggaa gcggaccag gcacaggac ggagtgagga ggctcaaaa aagaccagc	4140
tgcatcggct gcaagggaac ccactggatt gatgataacc cctccacaga gaccgctcag	4200
gcctggaacg ccggcttcct gagggaaga gcctatggca tcgatctgct gaggaccgag	4260
ggcgaacacg tggaggagc caccggagag acaaggagg aaagcgaaga cacagaaagc	4320
gatggcgacg acgaagacct gccctgcatt gtgtccaggg gcggaccaa ggtgaagagg	4380
ccccctatct ttatcagaag gctccataga ctgctcctga tgagggccat gaaccctgtg	4440
tgcctgcccg tgatcgtggc cccctacctc ttttggctgg ccgccattgc cgctagctgc	4500
ttcaccgcct ccgtgtccac agtggtgaca gccaccggcc tcgccctgag cctgctgctc	4560
ctcgctgccg tggcctccag ctacgccgct gctcaaagaa agctcctgac ccctgtcacc	4620
gtcctgacag ccgtcgtgac caccttttcc gctggcacct tcaagctgcc taggtgcaca	4680
cctggcgaca ggagtggtct ctacgtgcag agctccgtgg gcaatattgt gcagagctgc	4740
aatcccaggt acagcatttt tttcgactac atggccatcc ataggtccct caccaagatc	4800
tgggagtgat gatgagcggc cgcgatctgc tgtgccttct agttgccagc catctgttgt	4860
ttgcccctcc cccgtgcctt ccttgaccct ggaagggtgcc actcccactg tcctttccta	4920
ataaaatgag gaaattgcat cgcatgtgtc gagtaggtgt cattctattc tggggggtgg	4980
ggtggggcag gacagcaagg gggaggattg ggaagacaat agcaggcatg ctggggatgc	5040
ggtgggctct atggccgatc agcgatcgct gaggtgggtg agtgggcgtg gcctgggggtg	5100
gtcatgaaaa tatataagtt gggggtctta gggctctctt atttgtgttg cagagaccgc	5160
cggagccatg agcgggagca gcagcagcag cagtagcagc agcgccttgg atggcagcat	5220
cgtgagccct tatttgacga cgcggatgcc ccactgggcc ggggtgcgtc agaattgat	5280
gggctccagc atcgacggcc gaccgtcct gcccgcaaat tccgccacgc tgacctatgc	5340
gaccgtcgcg gggacgccgt tggacgccac cgccgccgcc gccgccaccg cagccgcctc	5400
ggccgtgcgc agcctggcca cggactttgc attcctggga ccactggcga caggggctac	5460
ttctcgggcc gctgctgccg ccgttcgcga tgacaagctg accgccctgc tggcgcagtt	5520

ggatgcgctt actcgggaac tgggtgacct ttctcagcag gtcatggccc tgcgccagca	5580
ggtctcctcc ctgcaagctg gcgggaatgc ttctcccaca aatgccgttt aagataaata	5640
aaaccagact ctgtttggat taaagaaaag tagcaagtgc attgctctct ttatttcata	5700
attttccgcg cgcgataggc cctagaccag cgttctcggg cgttgagggt gcggtgtatc	5760
ttctccagga cgtggtagag gtggctctgg acgttgagat acatgggcat gagcccgtcc	5820
cgggggtgga ggtagcacca ctgcagagct tcatgctccg ggggtggtgtt gtagatgatc	5880
cagtcgtagc aggagcgctg ggcatgggtgc ctaaaaatgt ccttcagcag caggccgatg	5940
gccaggggga ggcccttggg gtaagtgttt acaaaacggg taagttggga aggggtgcatt	6000
cggggagaga tgatgtgcat cttggactgt attttttagat tggcgatgtt tccgcccaga	6060
tcccttctgg gattcatgtt gtgcaggacc accagtacag tgtatccggg gcacttgggg	6120
aatttgtcat gcagcttaga gggaaaagcg tggaagaact tggagacgcc tttgtggcct	6180
cccagatttt ccatgcattc gtccatgatg atggcaatgg gcccgcgga ggcagcttgg	6240
gcaaagatat ttctggggtc gctgacgtcg tagttgtgtt ccagggtgag gtcgtcatag	6300
gccattttta caaagcgagg gcggagggtg cccgactggg ggatgatggg cccctctggc	6360
cctggggcgt agttgccctc gcagatctgc atttcccagg ccttaatctc ggagggggga	6420
atcatatcca cctgcggggc gatgaagaaa acggtttccg gagccgggga gattaactgg	6480
gatgagagca ggtttctaag cagctgtgat tttccacaac cgggtgggccc ataaataaca	6540
cctataaccg gttgcagctg gtagtttaga gagctgcagc tgccgtcgtc ccggaggagg	6600
ggggccacct cgttgagcat gtccctgacg cgcatgttct ccccgaccag atccgccaga	6660
aggcgctcgc cgcccaggga cagcagctct tgcaaggaag caaagttttt cagcggcttg	6720
aggccgtccg ccgtgggcat gtttttcagg gtctggctca gcagctccag gcggtcccag	6780
agctcgggtga cgtgctctac ggcatctcta tccagcatat ctctcgttt cgcggttg	6840
ggcgactttc gctgtagggc accaagcggg ggtcgtccag cggggccaga gtcatgtcct	6900
tccatgggag cagggtcctc gtcagggtgg tctgggtcac ggtgaagggg tgcgtccgg	6960
gctgagcgct tgccaagggt cgcttgaggc tggttctgct ggtgctgaag cgctgccggt	7020
cttcgccctg cgcgtcggcc aggtagcatt tgaccatggg gtcatagtcc agcccctccg	7080
cggcgtgtcc cttggcgcgc agcttgccct tggaggtggc gccgcacgag gggcagagca	7140

ggctcttgag cgcgtagagc ttgggggcga ggaagaccga ttcgggggag taggcgtccg	7200
cgccgcagac cccgcacacg gtctcgcact ccaccagcca ggtgagctcg gggcgcgccg	7260
ggtcaaaaac caggtttccc ccatgctttt tgatgcgttt cttacctcgg gtctccatga	7320
ggtggtgtcc ccgctcgggtg acgaagaggc tgtccgtgtc tccgtagacc gacttgaggg	7380
gtcttttctc caggggggtc cctcggcttt cctcgtagag gaactcggac cactctgaga	7440
cgaaggcccg cgtccaggcc aggacgaagg aggctatgtg ggaggggtag cggtcgttgt	7500
ccactagggg gtccaccttc tccaagggtgt gaagacacat gtcgccttcc tcggcgtcca	7560
ggaaggatgat tggctttag gtgtaggcca cgtgaccggg ggttcctgac gggggggtat	7620
aaaagggggg gggggcgcg tcgtcgtcac tctcttcgc atcgctgtct gcgagggccca	7680
gctgctgggg tgagtattcc ctctcgaagg cgggcatgac ctccgcgctg aggttgtcag	7740
tttccaaaaa cgaggaggat ttgatgttca cctgtcccga ggtgatacct ttgagggtac	7800
ccgctccat ctggtcagaa aacacgatct ttttattgtc cagcttggtg gcgaacgacc	7860
cgtagagggc gttggagagc agcttggcga tggagcgcag ggtctggttc ttgtccctgt	7920
cggcgcgctc cttggccgcg atgttgagct gcacgtactc gcgcgcgacg cagcgccact	7980
cggggaagac ggtggtgcgc tcgtcgggca ccaggcgcac gcgccagccg cggttgtgca	8040
gggtgaccag gtccacgctg gtggcgacct cgccgcgcag gcgctcgttg gtccagcaga	8100
gacggccgcc cttgcgcgag cagaaggggg gcaggggggtc gagctgggtc tcgtccgggg	8160
ggtccgcgtc cacggtgaaa accccggggc gcaggcgcgc gtcgaagtag tctatcttgc	8220
aaccttgcac gtccagcgcc tgctgccagt cgcgggcggc gagcgcgcgc tcgtaggggt	8280
tgagcggcgg gccccagggc atggggtggg tgagtgcgga ggcgtacatg ccgcagatgt	8340
catagacgta gaggggctcc cgcaggacct cgatgtaggt ggggtagcag cggccgccgc	8400
ggatgctggc gcgcacgtag tcatacagct cgtgcgaggg ggcgaggagg tcggggccca	8460
ggttggtgcg ggcggggcgc tccgcgcgga agacgatctg cctgaagatg gcatgcgagt	8520
tggaagagat ggtggggcgc tggaagacgt tgaagctggc gtcctgcagg ccgacggcgt	8580
cgcgcacgaa ggaggcgtag gagtcgcgca gcttgtgtac cagctcggcg gtgacctgca	8640
cgtcgagcgc gcagtagtcg agggctctgc ggatgatgtc atatttagcc tgccccttct	8700
ttttccacag ctcgcggttg aggacaaact cttcgcggtc tttccagtac tcttgatcg	8760

ggaaaccgtc	cggttccgaa	cggttaagagc	ctagcatgta	gaactggttg	acggcctggt	8820
aggcgcagca	gcccttctcc	acggggaggg	cgtaggcctg	cgcggccttg	cggagcgagg	8880
tgtgggtcag	ggcgaagggtg	tccctgacca	tgactttgag	gtactgggtgc	ttgaagtcgg	8940
agtcgtcgca	gccgccccgc	tcccagagcg	agaagtcggt	gcgcttcttg	gagcgggggt	9000
tgggcagagc	gaaggtgaca	tcgttgaaga	ggattttgcc	cgcgcggggc	atgaagttgc	9060
gggtgatgcg	gaagggccccc	ggcacttcag	agcggttggt	gatgacctgg	gcggcgagca	9120
cgatctcgtc	gaagccgttg	atgttggtgc	ccacgatgta	gagttccagg	aagcggggcc	9180
ggccctttac	ggtgggcagc	ttcttttagct	cttcgtaggt	gagctcctcg	ggcgaggcga	9240
ggccgtgctc	ggccagggcc	cagtccgcga	ggtgcggggt	gtctctgagg	aaggacttcc	9300
agaggtcgcg	ggccaggagg	gtctgcaggc	ggtctctgaa	ggtcctgaac	tggcggccca	9360
cggccatttt	ttcgggggtg	atgcagtaga	aggtgagggg	gtcttgctgc	cagcgggtccc	9420
agtcgagctg	cagggcgagg	tcgcgcgcgg	cggtgaccag	gcgctcgtcg	ccccgaatt	9480
tcatgaccag	catgaagggc	acgagctgct	ttccgaaggc	ccccatccaa	gtgtaggtct	9540
ctacatcgta	ggtgacaaag	aggcgctccg	tgcgaggatg	cgagccgatc	gggaagaact	9600
ggatctcccc	ccaccagttg	gaggagtggc	tgttgatgtg	gtggaagtag	aagtcccgtc	9660
gccggggccga	acactcgtgc	tggcttttgt	aaaagcgagc	gcagtactgg	cagcgctgca	9720
cgggctgtac	ctcatgcacg	agatgcacct	ttcgcccgcg	cacgaggaag	ccgaggggaa	9780
atctgagccc	ccgcctggc	tcgcggcatg	gctggttctc	ttctactttg	gatgcgtgtc	9840
cgtctccgtc	tggctcctcg	aggggtgtta	cggtggagcg	gaccaccacg	ccgcgcgagc	9900
cgcaggtcca	gatatcggcg	cgcggcggtc	ggagtttgat	gacgacatcg	cgcagctggg	9960
agctgtccat	ggtctggagc	tcccgcggcg	gcggcaggtc	agccgggagt	tcttgaggt	10020
tcacctcgca	gagtcgggcc	agggcgcggg	gcaggtctag	gtggtacctg	atctctaggg	10080
gcgtgttggt	ggcggcgtcg	atggcttgca	ggagcccgcg	gccccggggg	gcgacgacgg	10140
tgccccgcgg	ggtggtgggtg	gtggtggcgg	tgagctcag	aagcggtgcc	gcgggcgggc	10200
ccccggagggt	aggggggggt	ccggtccgc	gggcaggggc	ggcagcgga	cgtcggcgtg	10260
gagcgcgggc	aggagtgggt	gctgtgcccg	gaggttgctg	gcgaaggcga	cgacgcggcg	10320
gttgatctcc	tggatctggc	gcctctgcgt	gaagacgacg	ggcccgggtga	gcttgaacct	10380

gaaagagagt	tcgacagaat	caatctcggg	gtcattgacc	gcggcctggc	gcaggatctc	10440
ctgcacgtct	cccagattgt	cttggtaggc	gatctcggcc	atgaactgct	cgatctcttc	10500
ctcctggagg	tctccgcgtc	cggcgcgttc	cacggtggcc	gccaggtcgt	tggagatgcg	10560
ccccatgagc	tgcgagaagg	cgttgagtcc	gccctcgttc	cagactcggc	tgtagaccac	10620
gccccctgg	tcatcgcggg	cgcgcatgac	cacctgcgcg	aggttgagct	ccacgtgccg	10680
cgcgaagacg	gcgtagttgc	gcagacgctg	gaagaggtag	ttgagggtgg	tggcgggtgtg	10740
ctcggccacg	aagaagttca	tgaccacagc	gcgcaacgtg	gattcgttga	tgtcccccaa	10800
ggcctccagc	cgttccatgg	cctcgtagaa	gtccacggcg	aagttgaaaa	actgggagtt	10860
gcgcgccgac	acggtcaact	cctcctccag	aagacggatg	agctcggcga	cgggtgtcgcg	10920
cacctcgcgc	tcgaaggcta	tggggatctc	ttcctccgct	agcatcacca	cctcctcctc	10980
ttcctcctct	tctggcactt	ccatgatggc	ttcctcctct	tcgggggggtg	gcggcggcgg	11040
cgggtggggga	gggggcgctc	tgcgccggcg	gcggcgcacc	gggaggcggt	ccacgaagcg	11100
cgcgatcatc	tccccgcggc	ggcggcgcac	ggtctcgggtg	acggcgcggc	cgttctcccg	11160
ggggcgagct	tgggaagacg	cgccggacat	ctgggtgctgg	ggcgggtggc	cgtgaggcag	11220
cgagacggcg	ctgacgatgc	atctcaacaa	ttgctgcgta	ggtacgccgc	cgagggacct	11280
gagggagtcc	atatccaccg	gatccgaaaa	cctttcgagg	aaggcgtcta	accagtcgca	11340
gtcgcaaggt	aggctgagca	ccgtggcggg	cggcgggggg	tggggggagt	gtctggcgga	11400
ggtgctgctg	atgatgtaat	tgaagtaggc	ggacttgaca	cggcggatgg	tcgacaggag	11460
caccatgtcc	ttgggtccgg	cctgctggat	gcggaggcgg	tcggctatgc	cccaggcttc	11520
gttctggcat	cggcgcaggt	ccttgtagta	gtcttgcatg	agcctttcca	ccggcacctc	11580
ttctccttcc	tcttctgctt	cttccatgtc	tgcttcggcc	ctggggcggc	gccgcgcccc	11640
cctgcccccc	atgcgcgtga	ccccgaaccc	cctgagcggg	tggagcaggg	ccaggtcggc	11700
gacgacgcgc	tcggccagga	tggcctgctg	cacctgcgtg	agggtggttt	ggaagtcatc	11760
caagtccacg	aagcgggtgg	aggcgcccgt	gttgatgggtg	taggtgcagt	tggccatgac	11820
ggaccagtgt	acggtctggg	ggcccgggtg	cgacatctcg	gtgtacctga	gtcgcgagta	11880
ggcgcgggag	tcgaagacgt	agtcgttgca	agtccgcacc	aggtactggg	agcccaccag	11940
gaagtgcggc	ggcggctggc	ggtagagggg	ccagcgcagg	gtggcggggg	ctccgggggc	12000

caggtcttcc agcatgaggc ggtggtaggc gtagatgtac ctggacatcc aggtgatacc	12060
cgcggcgggtg gtggaggcgc gcgggaagtc gcgcacccgg ttccagatgt tgcgcagggg	12120
cagaaagtgc tccatggtag gcgtgctctg tccagtcaga cgcgcgcagt cgttgatact	12180
ctagaccagg gaaaacgaaa gccggtcagc gggcactctt ccgtggtctg gtgaatagat	12240
cgcaagggtg tcatggcgga gggcctcggg tcgagccccg ggtccggggc ggacgggtccg	12300
ccatgatcca cgcggttacc gcccgcgtgt cgaaccagg tgtgcgacgt cagacaacgg	12360
tggagtgttc cttttggcgt ttttctggcc gggcgccggc gccgcgtaag agactaagcc	12420
gcgaaagcga aagcagtaag tggctcgctc cccgtagccg gagggatcct tgctaagggt	12480
tgcgttgagg cgaaccccg ttcgaatccc gtactcgggc cggccggacc cgcggctaag	12540
gtgttggtt ggcctcccc tcgtataaag accccgcttg cggattgact ccggacacgg	12600
ggacgagccc cttttatttt tgctttcccc agatgcatcc ggtgctgcgg cagatgcgcc	12660
ccccgcccc gacagcagca caacaccagc aagagcggca gcaacagcag cgggagtcac	12720
gcagggcccc ctcaccacc ctcggcgggc cggccacctc ggctccgcg gccgtgtctg	12780
gcgcctgcgg cggcggcggg gggccggctg acgacccga ggagccccg cggcgcaggg	12840
ccagacacta cctggacctg gaggagggcg agggcctggc gcggctgggg gcgccgtctc	12900
ccgagcgcca cccgcgggtg cagctgaagc gcgactcgcg cgaggcgtag gtgcctcggc	12960
agaacctgtt cagggaccgc gcgggcgagg agcccagga gatgcgggac aggaggttca	13020
gcgcagggcg ggagctgcgg caggggctga accgcgagcg gctgctgcgc gaggaggact	13080
ttgagcccga cgcgcggacg gggatcagcc ccgcgcgcgc gcacgtggcg gccgccgacc	13140
tggtagcggc gtacgagcag acggtgaacc aggagatcaa cttccaaaag agtttcaaca	13200
accacgtgcg cacgctgggt gcgcgcgagg aggtgacat cgggctgatg cacctgtggg	13260
actttgtaag cgcgctgggt cagaaccca acagcaagcc tctgacggcg cagctgttcc	13320
tgatagtga gcacagcagg gacaacgagg cgtttaggga cgcgctgctg aacatcacccg	13380
agcccagagg tcggtggctg ctggacctga ttaacatcct gcagagcata gtggtgcagg	13440
agcgcagcct gagcctggcc gacaagggtg cggccatcaa ctactcgatg ctgagcctgg	13500
gcaagtttta cgcgcgcaag atctaccaga cgccgtacgt gcccatagac aaggaggtga	13560
agatcgacgg tttttacatg cgcatggcgc tgaagggtg caccctgagc gacgacctgg	13620

gcgtgtaccg caacgagcgc atccacaagg ccgtgagcgt gagccggcgg cgcgagctga	13680
gcgaccgcga gctgatgcac agcctgcagc gggcgctggc gggcgccggc agcggcgaca	13740
gggaggcgga gtcctacttc gatgcggggg cggacctgcg ctggggcgccc agccggcggg	13800
ccctggaggc cgcgggggtc cgcgaggact atgacgagga cggcgaggag gatgaggagt	13860
acgagctaga ggaggcgag tacctggact aaaccgcggg tgggtgtttcc ggtagatgca	13920
agacccgaac gtggtggacc cggcgctgcg ggcggctctg cagagccagc cgtccggcct	13980
taactcctca gacgactggc gacaggtcat ggaccgcac atgtcgctga cggcgcgtaa	14040
cccggacgcg ttccggcagc agccgcaggc caacaggctc tccgccatcc tggaggcggt	14100
ggtgcctgcg cgctcgaacc ccacgcacga gaaggtgctg gccatagtga acgcgctggc	14160
cgagaacagg gccatccgcc cggacgaggc cgggctgggtg tacgacgcgc tgctgcagcg	14220
cgtggcccg cgtggcccg tacaacagcg gcaacgtgca gaccaacctg gaccggctgg tgggggacgt	14280
gcgcgaggcg gtggcgagc gcgagcgcg ggatcggcag ggcaacctgg gctccatggt	14340
ggcgctgaat gccttctga gcacgcagcc ggccaacctg ccgcgggggc aggaagacta	14400
caccaacttt gtgagcgcg tgcggtgat ggtgaccgag acccccaga gcgaggtgta	14460
ccagtgggc ccggactact tcttcagac cagcagacag ggctgcaga cggatgaacct	14520
gagccaggct ttcaagaacc tgcgggggct gtggggcgctg aaggcgccca ccggcgaccg	14580
ggcgacgggtg tccagcctgc tgacgcccac ctcgcgcctg ctgctgctgc tgatcgcgcc	14640
gttcacggac agcggcgagc tgtcccggga cacctacctg gggcacctgc tgaccctgta	14700
ccgcgaggcc atcgggcagg cgcaggtgga cgagcacacc ttccaggaga tcaccagcgt	14760
gagccgcgcg ctggggcagg aggacacgag cagcctggag gcgactctga actacctgct	14820
gaccaaccgg cggcagaaga ttccctcgct gcacagcctg acctccgagg aggagcgcat	14880
cttgcgctac gtgcagcaga gcgtgagcct gaacctgatg cgcgacgggg tgacgccag	14940
cgtggcgctg gacatgaccg cgcgcaacat ggaaccgggc atgtacgccg cgcaccggcc	15000
ttacatcaac cgcctgatgg actacctgca tcgcgcggcg gccgtgaacc ccgagtactt	15060
taccaacgcc atcctgaacc cgcactggct cccgccgcc gggttctaca gcgggggctt	15120
cgaggtcccg gagaccaacg atggcttcct gtgggacgac atggacgaca gcgtgttctc	15180
cccgcggccg caggcgctgg cggaagcgtc cctgctgcgt cccaagaagg aggaggagga	15240

ggaggcgagt	cgccgccgcg	gcagcagcgg	cgtggcttct	ctgtccgagc	tgggggcggc	15300
agccgccgcg	cgccccgggt	ccctggggcg	cagccccttt	ccgagcctgg	tggggtctct	15360
gcacagcgag	cgcaccaccc	gccctcggct	gctggggcgag	gacgagtacc	tgaataactc	15420
cctgctgcag	ccggtgcggg	agaaaaacct	gcctcccgcc	ttccccaaca	acgggataga	15480
gagcctggtg	gacaagatga	gcagatggaa	gacctatgcg	caggagcaca	gggacgcgcc	15540
tgcgctccgg	ccgcccacgc	ggcgccagcg	ccacgaccgg	cagcgggggc	tgggtgtggga	15600
tgacgaggac	tccgcggacg	atagcagcgt	gctggacctg	ggagggagcg	gcaaccggtt	15660
cgcgcacctg	cgccccgcc	tggggaggat	gttttaaaaa	aaaaaaaaaa	angcaagaag	15720
catgatgcaa	aaattaaata	aaactcacca	aggccatggc	gaccgagcgt	tggtttcttg	15780
tgttcccttc	agtatgcggc	gcgcggcgat	gtaccaggag	ggacctctc	cctcttacga	15840
gagcgtggtg	ggcgcgggcg	cggcgggcgc	ctcttctccc	tttgcgtcgc	agctgctgga	15900
gccgccgtac	gtgcctccgc	gctacctgcg	gcctacgggg	gggagaaaca	gcatccgtta	15960
ctcggagctg	gcgcccctgt	tcgacaccac	ccgggtgtac	ctggtggaca	acaagtcggc	16020
ggacgtggcc	tccctgaact	accagaacga	ccacagcaat	tttttgacca	cggtcatcca	16080
gaacaatgac	tacagcccga	gcgaggccag	caccagacc	atcaatctgg	atgaccggtc	16140
gcactggggc	ggcgacctga	aaaccatcct	gcacaccaac	atgcccacg	tgaacgagtt	16200
catgttcacc	aataagttca	aggcgcgggg	gatggtgtcg	cgctcgca	ccaaggaaga	16260
ccgggtggag	ctgaagtacg	agtgggtgga	gttcgagctg	ccagagggca	actactccga	16320
gaccatgacc	attgacctga	tgaacaacgc	gatcgtggag	cactatctga	aagtgggcag	16380
gcagaacggg	gtcctggaga	gcgacatcgg	ggtcaagttc	gacaccagga	acttccgcct	16440
ggggctggac	cccgtgaccg	ggctggttat	gcccgggggtg	tacaccaacg	aggccttcca	16500
tcccgacatc	atcctgctgc	ccggctgcgg	ggtggacttc	acttacagcc	gcctgagcaa	16560
cctcctgggc	atccgcaagc	ggcagccctt	ccaggagggc	ttcaggatca	cctacgagga	16620
cctggagggg	ggcaacatcc	ccgcgctcct	cgatgtggag	gcctaccagg	atagcttgaa	16680
ggaaaatgag	gcgggacagg	aggataccgc	ccccgccgcc	tccgccgccg	ccgagcaggg	16740
cgaggatgct	gctgacaccg	cggccgcgga	cggggcagag	gccgaccccg	ctatggtggt	16800
ggaggctccc	gagcaggagg	aggacatgaa	tgacagtgcg	gtgcgcggag	acaccttcgt	16860

cacccggggg	gaggaaaagc	aagcggaggc	cgaggccgcg	gccgaggaaa	agcaactggc	16920
ggcagcagcg	gcggcggcgg	cgttggccgc	ggcggaggct	gagtctgagg	ggaccaagcc	16980
cgccaaggag	cccgtgatta	agcccctgac	cgaagatagc	aagaagcgca	gttacaacct	17040
gctcaaggac	agcaccaaca	ccgcgtaccg	cagctggtac	ctggcctaca	actacggcga	17100
cccgtcgacg	ggggtgcgct	cctggaccct	gctgtgcacg	ccggacgtga	cctgcggtct	17160
ggagcaggtg	tactggtcgc	tgcccgacat	gatgcaagac	cccgtgacct	tccgctccac	17220
gcggcaggtc	agcaacttcc	cggtggtggg	cgccgagctg	ctgcccgtgc	actccaagag	17280
cttctacaac	gaccaggccg	tctactccca	gtcatccgc	cagttcacct	ctctgaccca	17340
cgtgttcaat	cgctttcctg	agaaccagat	tctggcgcgc	ccgcccgcgc	ccaccatcac	17400
caccgtcagt	gaaaacgttc	ctgctctcac	agatcacggg	acgctaccgc	tgcgcaacag	17460
catcggagga	gtccagcgag	tgaccgttac	tgacgccaga	cgccgcacct	gcccctacgt	17520
ttacaaggcc	ttgggcatag	tctcgccgcg	cgctccttcc	agccgcactt	tttgagcaac	17580
accaccatca	tgtccatcct	gatctcacc	agcaataact	ccggctgggg	actgctgcgc	17640
gcgcccagca	agatgttcgg	aggggcgagg	aagcgttccg	agcagcacc	cgtgcgcgtg	17700
gcggggcact	tccgcgcccc	ctggggagcg	cacaaacgcg	gccgcgcggg	gcgcaccacc	17760
gtggacgacg	ccatcgactc	ggtggtggag	caggcgcgca	actacaggcc	cgcggtctct	17820
accgtggacg	cggccatcca	gaccgtggtg	cggggcgcgc	ggcgggtacg	caagctgaag	17880
agccgccgga	agcgcgtggc	ccgccgccac	cgccgccgac	ccggggccgc	cgccaaacgc	17940
gccgccgcgg	ccctgcttcg	ccgggccaaag	cgcacgggcc	gccgcgccgc	catgagggcc	18000
gcgcgccgct	tggccgccgg	catcaccgcc	gccaccatgg	ccccccgtac	ccgaagacgc	18060
gcggccgccg	ccgccgccgc	cgccatcagt	gacatggcca	gcaggcgccg	gggcaacgtg	18120
tactgggtgc	gcgactcggg	gaccggcacg	cgcgtgcccg	tgcgcttccg	ccccccgcgg	18180
acttgagatg	atgtgaaaaa	acaacactga	gtctcctgct	gttgtgtgta	tcccagcggc	18240
ggcggcgcgc	gcagcgtcat	gtccaagcgc	aaaatcaaag	aagagatgct	ccaggtcgtc	18300
gcgccggaga	tctatgggcc	cccgaagaag	gaagagcagg	attcgaagcc	ccgcaagata	18360
aagcgggtca	aaaagaaaaa	gaaagatgat	gacgatgccg	atggggaggt	ggagttcctg	18420
cgcgccacgg	cgcccaggcg	cccgggtgcag	tggaagggcc	ggcgcgtaaa	gcgcgtcctg	18480

cgccccggca ccgcggtggt cttcacgccc ggcgagcgct ccacccggac tttcaagcgc	18540
gtctatgacg aggtgtacgg cgacgaagac ctgctggagc aggccaacga gcgcttcgga	18600
gagtttgctt acgggaagcg tcagcgggcg ctggggaagg aggacctgct ggcgctgccg	18660
ctggaccagg gcaacccac ccccagtctg aagcccgtga ccctgcagca ggtgctgccg	18720
agcagcgcac cctccgaggc gaagcggggt ctgaagcgcg agggcggcga cctggcgccc	18780
accgtgcagc tcatggtgcc caagcggcag aggctggagg atgtgctgga gaaaatgaaa	18840
gtagaccccg gtctgcagcc ggacatcagg gtccgcccc tcaagcaggt ggcgccgggc	18900
ctcggcgtgc agaccgtgga cgtggtcatc cccaccggca actccccgc cgccgccacc	18960
actaccgctg cctccacgga catggagaca cagaccgatc ccgccgcagc cgcagccgca	19020
gccgccgccg cgacctcctc ggcgggaggtg cagacggacc cctggctgcc gccggcgatg	19080
tcagctcccc gcgcgcgtcg cgggcgcagg aagtacggcg ccgccaacgc gtcctgccc	19140
gagtacgcct tgcctcctt catcgcgccc acccccggct accgaggcta tacctaccgc	19200
ccgcgaagag ccaagggttc caccgccgt cccgccgac gcgccgccgc caccaccgc	19260
cgccgccgcc gcagacgcca gcccgcactg gctccagtct ccgtgaggaa agtggcgcg	19320
gacggacaca ccctggtgct gcccagggcg cgctaccacc ccagcatcgt ttaaaagcct	19380
gttgtggttc ttgcagatat ggccctcact tgccgcctcc gtttcccggt gccgggatac	19440
cgaggaggaa gatcgcgccg caggaggggt ctggccggcc gcggcctgag cggaggcagc	19500
cgccgcgcgc accggcggcg acgcgccacc agccgacgca tgcgcggcgg ggtgctgccc	19560
ctgttaatcc ccctgatcgc cgcggcgatc ggcgccgtgc ccgggatcgc ctccgtggcc	19620
ttgcaagcgt cccagaggca ttgacagact tgcaaacttg caaatatgga aaaaaaacc	19680
ccaataaaaa agtctagact ctcacgctcg cttggtcctg tgactatfff gtagaatgga	19740
agacatcaac tttgcgtcgc tggccccgcg tcacggctcg cgcccgttcc tgggacactg	19800
gaacgatatc ggcaccagca acatgagcgg tggcgcttc agttggggct ctctgtggag	19860
cggcattaaa agtatcgggt ctgccgttaa aaattacggc tcccgggcct ggaacagcag	19920
cacgggccag atgttgagag acaagttgaa agagcagaac ttccagcaga aggtggtgga	19980
gggcctggcc tccggcatca acggggtggt ggacctggcc aaccaggccg tgcagaataa	20040
gatcaacagc agactggacc cccggccgcc ggtggaggag gtgccgccgg cgctggagac	20100

ggtgtcccc	gatgggctg	gcgagaagcg	cccgcggccc	gatagggaag	agaccactct	20160
ggtcacgcag	accgatgagc	cgccccgta	tgaggaggcc	ctgaagcaag	gtctgcccac	20220
cacgcggccc	atcgcgccca	tggccaccgg	ggtggtgggc	cgccacaccc	ccgccacgct	20280
ggacttgcct	ccgcccgccg	atgtgccgca	gcagcagaag	gcggcacagc	cgggcccgcc	20340
cgcgaccgcc	tcccgttcct	ccgccggtcc	tctgcgccgc	gcggccagcg	gccccgcgg	20400
gggggtcgcg	aggcacggca	actggcagag	cacgctgaac	agcatcgtgg	gtctgggggt	20460
gcggtccgtg	aagcgccgcc	gatgctactg	aatagcttag	ctaactgttt	gtatgtgtgt	20520
atgcgcccta	tgtcgccgcc	agaggagctg	ctgagtcgcc	gccgttcgcg	cgcccaccac	20580
caccgccact	ccgcccctca	agatggcgac	cccatcgatg	atgccgcagt	ggtcgtacat	20640
gcacatctcg	ggccaggacg	cctcggagta	cctgagcccc	gggctggtgc	agttcgcccc	20700
cgccaccgag	agctacttca	gcctgagtaa	caagtttagg	aacccacagg	tggcgcccac	20760
gcacgatgtg	accaccgacc	ggtctcagcg	cctgacgctg	cggttcattc	ccgtggaccg	20820
cgaggacacc	gcgtactcgt	acaaggcgcg	gttcaccctg	gccgtgggcg	acaaccgcgt	20880
gctggacatg	gcctccacct	actttgacat	ccgcgggggtg	ctggaccggg	gtcccacttt	20940
caagccctac	tctggcaccg	cctacaactc	cctggcccc	aagggcgctc	ccaactcctg	21000
cgagtgggag	caagaggaaa	ctcaggcagt	tgaagaagca	gcagaagagg	aagaagaaga	21060
tgctgacggg	caagctgagg	aagagcaagc	agctaccaa	aagactcatg	tatatgtcta	21120
ggctcccctt	tctggcgaaa	aaattagtaa	agatggtctg	caaataggaa	cggacgctac	21180
agctacagaa	caaaaaccta	tttatgcaga	ccctacattc	cagcccgaac	cccaaactcg	21240
ggagtcccag	tggaatgagg	cagatgctac	agtcgccggc	ggtagagtgc	taaagaaatc	21300
tactcccatg	aaaccatgct	atggttccta	tgcaagaccc	acaaatgcta	atggaggtca	21360
gggtgtacta	acggcaaagt	cccagggaca	gctagaatct	caggttgaaa	tgcaattctt	21420
ttcaacttct	gaaaacgccc	gtaacgaggc	taacaacatt	cagcccaa	tggtgctgta	21480
tagtgaggat	gtgcacatgg	agaccccgga	tacgcacctt	tcttacaagc	ccgcaaaaag	21540
cgatgacaat	tcaaaaatca	tgctgggtca	gcagtccatg	cccaacagac	ctaattacat	21600
cggcttcaga	gacaacttta	tcggcctcat	gtattacaat	agcactggca	acatgggagt	21660
gcttgacagg	caggcctctc	agttgaatgc	agtgggtggac	ttgcaagaca	gaaacacaga	21720

actgtcctac cagctcttgc ttgattccat gggtagacaga accagatact tttccatgtg	21780
gaatcaggca gtggacagtt atgaccaga tgtagaatt attgaaaatc atggaactga	21840
agacgagctc cccaactatt gtttccctct gggtagcata ggggtaactg acacttacca	21900
ggctgttaaa accaacaatg gcaataacgg gggccaggtg acttgacaa aagatgaaac	21960
ttttgcagat cgcaatgaaa taggggtggg aaacaatttc gctatggaga tcaacctcag	22020
tgccaacctg tggagaaact tcctgtactc caacgtggcg ctgtacctac cagacaagct	22080
taagtacaac ccctccaatg tggacatctc tgacaacccc aacacctacg attacatgaa	22140
caagcgagtg gtggccccgg ggctggtgga ctgctacatc aacctgggcg cgcgctggtc	22200
gctggactac atggacaacg tcaaccctt caaccaccac cgcaatgcgg gcctgcgcta	22260
ccgctccatg ctctgggca acgggcgcta cgtgcccttc cacatccagg tgccccagaa	22320
gttctttgcc atcaagaacc tcctcctcct gccgggctcc tacacctacg agtggaactt	22380
caggaaggat gtcaacatgg tcctccagag ctctctgggt aacgatctca gggtagacgg	22440
ggccagcatc aagttcgaga gcatctgcct ctacgccacc ttcttcccc tggcccacaa	22500
cacggcctcc acgctcgagg ccatgctcag gaacgacacc aacgaccagt cttcaatga	22560
ctacctctcc gccgccaaca tgctctaccc cataccgcc aacgccacca acgtccccat	22620
ctccatcccc tcgcgcaact gggcggcctt ccgcggtgg gccttcaccc gcctcaagac	22680
caaggagacc ccctccctgg gctcgggatt cgaccctac tacacctact cgggctccat	22740
tccctacctg gacggcacct tctacctcaa ccacatttc aagaaggctt cggtcacctt	22800
cgactcctcg gtcagctggc cgggcaacga ccgtctgctc accccaacg agttcgagat	22860
caagcgctcg gtcgacgggg agggctacaa cgtggcccag tgcaacatga ccaaggactg	22920
gttcctggtc cagatgctgg ccaactacaa catcggtac cagggttctt acatcccaga	22980
gagctacaag gacaggatgt actccttctt caggaacttc cagcccatga gccggcaggt	23040
ggtggaccag accaagtaca aggactacca ggaggtgggc atcatccacc agcacaacaa	23100
ctcgggcttc gtgggctacc tcgccccac catgcgcgag ggacaggcct accccgcaa	23160
cttcccctat ccgctcatag gcaagaccgc ggtcgacagc atcaccaga aaaagttcct	23220
ctgcgaccgc accctctggc gcatccctt ctccagcaac ttcatgtcca tgggtgcgct	23280
ctcggacctg ggccagaact tgctctacgc caactccgcc cacgccctcg acatgacctt	23340

cgaggtcgac cccatggacg agcccaccct tctctatgtt ctgttcgaag tctttgacgt	23400
ggtccgggtc caccagccgc accgcggcgt catcgagacc gtgtacctgc gtacgccctt	23460
ctcggccggc aacgccacca cctaaagaag caagccgcag tcatcgccgc ctgcatgccg	23520
tcgggttcca ccgagcaaga gctcagggcc atcgtcagag acctgggatg cgggccctat	23580
tttttgggca ctttcgaaa gcgcttcctt ggctttgtct cccacacaaa gctggcctgc	23640
gccatcgtca acacggccgg ccgcgagacc gggggcgtgc actggctggc cttcgcctgg	23700
aaccgcgct ccaaaacatg cttcctcttt gaccccttcg gcttttcgga ccagcggctc	23760
aagcaaatct acgagttcga gtacgagggc ttgctgcgtc gcagcgccat cgcctcctcg	23820
cccgaccgct gcgtcacctt cgaaaagtcc acccagaccg tgcagggggc cgactcggcc	23880
gcctgcggtc tcttctgctg catgtttctg cagcctttg tgcactggcc tcagagtccc	23940
atggaccgca accccaccat gaacttgctg acgggggtgc ccaactccat gctccagagc	24000
ccccaggtcg agcccaccct gcgccgaac caggagcagc tctacagctt cctggagcgc	24060
cactcgcctt acttccgccg ccacagcgca cagatcagga gggccacctc cttctgccac	24120
ttgcaagaga tgcaagaagg gtaataacga tgtacacact ttttttctca ataaatggca	24180
tctttttatt tatacaagct ctctggggta ttcatctccc accaccacc gccgttgtcg	24240
ccatctggct ctatttagaa atcgaaaggg ttctgccggg agtcgccgtg cgccacgggc	24300
agggacacgt tgcgatactg gtagcgggtg cccacttga actcgggcac caccaggcga	24360
ggcagctcgg ggaagttttc gctccacagg ctgcgggtca gcaccagcgc gttcatcagg	24420
tcgggcgccg agatcttgaa gtcgcagttg gggccgccgc cctgcgcgcg cgagttgcgg	24480
tacaccgggt tgcagcactg gaacaccaac agcgccgggt gcttcacgct ggccagcacg	24540
ctgcggtcgg agatcagctc ggcgctcagg tcctccgcgt tgctcagcgc gaacggggtc	24600
atcttgggca cttgccgcc caggaagggc gcgtgccccg gtttcgagtt gcagtcgcag	24660
cgcagcggga tcagcaggtg cccgtgcccc gactcggcgt tggggtacag cgcgcgcatg	24720
aaggcctgca tctggcggaa ggccatctgg gccttggcgc cctccgagaa gaacatgccg	24780
caggacttgc ccgagaactg gtttgccggg cagctggcgt cgtgcaggca gcagcgcgcg	24840
tcggtgttgg cgatctgcac cacgttgccg cccaccgggt tcttcacgat cttggccttg	24900
gacgattgct cttcagcgc gcgctgcccc ttctcgttgg tcacatccat ctcgatcaca	24960

tggtccttgt tcaccatgct gctgccgtgc agacacttca gctcgccctc cgtctcggtg	25020
cagcgggtgct gccacagcgc gcagcccgtg ggctcgaaag acttgtaggt cacctccgcg	25080
aaggactgca ggtaccccctg caaaaagcgg cccatcatgg tcacgaaggt cttgttgctg	25140
ctgaaggcca gctgcagccc gcgggtgctcc tcgttcagcc aggtcttgca cacggccgcc	25200
agcgcctcca cctggtcggg cagcatcttg aagttcacct tcagctcatt ctccacgtgg	25260
tacttgcca tcagcgtgcg cgccgcctcc atgcccttct cccaggccga caccagcggc	25320
aggctcacgg ggttcttcac catcaccgtg gccgccgcct ccgccgcgct ttcgctttcc	25380
gccccgctgt tctcttcctc ttctctctct tcctcgccgc cgccactcg cagccccgc	25440
accacgggggt cgtcttcctg caggcgctgc accttgcgct tgccgttgcg cccctgcttg	25500
atgcgcacgg gcgggttgct gaagcccacc atcaccagcg cggcctcttc ttgctcgccc	25560
tcgctgtcca gaatgacctc cggggagggg ggggttggtca tcctcagta cagggcacgc	25620
ttctttttct tcctgggggc gttcgccagc tccgcggctg cgcccgctgc cgaggtcgaa	25680
ggccgagggc tgggcgtgcg cggcaccagc gcgtcctgcg agccgtcctc gtcctcctcg	25740
gactcgagac ggaggcgggc ccgcttcttc gggggcgcg cgggcggcgg aggcggcggc	25800
ggcgacggag acggggacga gacatcgctc aggggtgggtg gacggcgggc cgcgcccgct	25860
ccgcgctcgg ggggtggtctc gcgctggtcc tcttcccagc tggccatctc cactgctcc	25920
ttctcctata ggcagaaaga gatcatggag tctctcatgc gagtcgagaa ggaggaggac	25980
agcctaaccg cccctctga gccctccacc accgcccca ccaccgcaa tgccgccgcg	26040
gacgacgcgc ccaccgagac caccgccagt accaccctcc ccagcgacgc accccgctc	26100
gagaatgaag tgctgatcga gcaggacccg ggttttgtga gcggagagga ggatgaggtg	26160
gatgagaagg agaaggagga ggtcgccgcc tcagtgccaa aagaggataa aaagcaagac	26220
caggacgacg cagataagga tgagacagca gtcgggcggg ggaacggaag ccatgatgct	26280
gatgacggct acctagacgt gggagacgac gtgctgctta agcacctgca ccgccagtgc	26340
gtcatcgtct gcgacgcgt gcaggagcgc tgcgaagtgc ccctggacgt ggcggaggctc	26400
agccgcgcct acgagcggca cctcttcgcg ccgcacgtgc ccccaagcg ccgggagaac	26460
ggcacctgcg agcccaacc gcgtctcaac ttctaccgg tcttcgcggt acccgaggtg	26520
ctggccacct accacatctt ttccaaaac tgcaagatcc ccctctcctg ccgcgccaac	26580

cgcacccgcg ccgacaaaac cctgaccctg cggcagggcg cccacatacc tgatatcgcc	26640
tctctggagg aagtgcccaa gatcttcgag ggtctcggtc gcgacgagaa acgggcgggcg	26700
aacgctctgc acggagacag cgaaaacgag agtcactcgg gggtgctggg ggagctcgag	26760
ggcgacaacg cgcgcctggc cgtactcaag cgcagcatag aggtcaccca ctttgcctac	26820
ccggcgctca acctgcccc caaggtcatg agtgtggtca tgggcgagct catcatgcgc	26880
cgcgcccagc ccctggccgc ggatgcaaac ttgcaagagt cctccgagga aggcctgccc	26940
gcggtcagcg acgagcagct ggcgcgctgg ctggagaccc gcgaccccg gcagctggag	27000
gagcggcgca agctcatgat ggccgcggtg ctggtcaccg tggagctcga gtgtctgcag	27060
cgcttcttcg cggaccccga gatgcagcgc aagctcgagg agaccctgca ctacaccttc	27120
cgccagggct acgtgcgcca ggcctgcaag atctccaacg tggagctctg caacctggtc	27180
tcctacctgg gcatcctgca cgagaaccgc ctcgggcaga acgtcctgca ctccaccctc	27240
aaaggggagg cgcgccgca ctacatccgc gactgcgcct acctcttcct ctgctacacc	27300
tggcagacgg ccatgggggt ctggcagcag tgcctggagg agcgcaacct caaggagctg	27360
gaaaagctcc tcaagcgcac cctcaggga cctctggacgg gcttcaacga gcgctcggtg	27420
gccgccgcgc tggcggacat catctttccc gagcgctgc tcaagacct gcagcagggc	27480
ctgcccgact tcaccagcca gagcatgctg cagaacttca ggactttcat cctggagcgc	27540
tcgggcatcc tgccggccac ttgctgcgcg ctgcccagcg acttcgtgcc catcaagtac	27600
agggagtgcc cgccgccgt ctggggccac tgctacctt tccagctggc caactacctc	27660
gcctaccact cggacctcat ggaagacgtg agcggcgagg gcctgctcga gtgccactgc	27720
cgctgcaacc tctgcacgcc ccaccgctct ctagtctgca acccgagct gctcagcgag	27780
agtcagatta tcggtacctt cgagctgcag ggtccctcgc ctgacgagaa gtccgcggct	27840
ccagggtga aactcactcc ggggctgtgg acttccgcct acctacgaa atttgtacct	27900
gaggactacc acgcccacga gatcaggttc tacgaagacc aatcccgcc gcccaaggcg	27960
gagctcaccg cctgcgtcat caccagggg cacatcctgg gccaattgca agccatcaac	28020
aaagcccgcc gagagttctt gctgaaaaag ggtcgggggg tgtacctgga ccccagttc	28080
ggcgaggagc taaaccgct acccccgcc cgccccagc agcgggacct tgcttccag	28140
gatggcacc agaaagaagc agcagccgc gccgccgcg cagccataca tgcttctgga	28200

ggaagaggag	gaggactggg	acagtcaggc	agaggaggtt	tcggacgagg	agcaggagga	28260
gatgatggaa	gactgggagg	aggacagcag	cctagacgag	gaagcttcag	aggccgaaga	28320
ggtggcagac	gcaacaccat	cgccctcggg	cgagccccc	tcgccggggc	ccctgaaatc	28380
ctccgaaccc	agcaccagcg	ctataacctc	cgctcctccg	gcgccggcgc	caccgcgccg	28440
cagaccaaac	cgtagatggg	acaccacagg	aaccgggggtc	ggtaagtcca	agtgtcccgc	28500
gccgccaccg	cagcagcagc	agcagcagcg	ccagggttac	cgctcgtggc	gcgggcacaa	28560
gaacgccata	gtcgcctgct	tgcaagactg	cgggggcaac	atctctttcg	cccgcgcgtt	28620
cctgctattc	caccacgggg	tcgcctttcc	ccgcaatgtc	ctgcattact	accgtcatct	28680
ctacagcccc	tactgcagcg	gcgaccaga	ggcggcagcg	gcagccacag	cggcgaccac	28740
cacctaggaa	gatatcctcc	gcgggcaaga	cagcggcagc	agcggccagg	agaccgcgg	28800
cagcagcggc	gggagcgggtg	ggcgcactgc	gcctctcgcc	caacgaaccc	ctctcgaccc	28860
gggagctcag	acacaggatc	ttccccactt	tgtatgccat	cttccaacag	agcagaggcc	28920
aggagcagga	gctgaaaata	aaaaacagat	ctctgcgctc	cctcaccgc	agctgtctgt	28980
atcacaaaag	cgaagatcag	cttcggcgca	cgctggagga	cgcgaggga	ctcttcagca	29040
aatactgcgc	gctcactctt	aaagactagc	tccgcgccct	tctcgaattt	aggcgggaga	29100
aaactacgtc	atcgccggcc	gccgccagc	ccgccagcc	gagatgagca	aagagattcc	29160
cacgccatac	atgtggagct	accagccgca	gatgggactc	gcggcgggag	cggcccagga	29220
ctactccacc	cgcatgaact	acatgagcgc	gggacccac	atgatctcac	aggtcaacgg	29280
gatccgcgcc	cagcgaaccc	aaatactgct	ggaacaggcg	gccatcaccg	ccacgccccg	29340
ccataatctc	aacccccgaa	attggcccg	cgccctcgtg	taccaggaaa	ccccctccgc	29400
caccaccgta	ctacttccgc	gtgacgcca	ggccgaagtc	cagatgacta	actcaggggc	29460
gcagctcgcg	ggcggctttc	gtcacggggc	gcggccgctc	cgaccaggta	taagacacct	29520
gatgatcaga	ggccgaggta	tccagctcaa	cgacgagtcg	gtgagctctt	cgctcggctt	29580
ccgtccggac	ggaactttcc	agctcgccgg	atccggccgc	tcttcgttca	cgccccgcca	29640
ggcgtacctg	actctgcaga	cctcgtcctc	ggagccccgc	tccggcggca	tcggaaccct	29700
ccagttcgtg	gaggagttcg	tgccctcggg	ctacttcaac	cccttctcgg	gacctcccgg	29760
acgctacccc	gaccagttca	ttccgaactt	tgacgcgggtg	aaggactcgg	cggacggcta	29820

cgactgaatg tcaggtgtcg aggcagagca gcttcgcctg agacacctcg agcactgccg	29880
ccgccacaag tgcttcgccc gcggttctgg tgagttctgc tactttcagc tacccgagga	29940
gcataccgag gggccggcgc acggcgtccg cctgaccacc cagggcgagg ttacctgttc	30000
cctcatccgg gagtttacc tccgtcccct gctagtggag cgggagcggg gtccctgtgt	30060
cctaactatc gcctgcaact gccctaacc tggattacat caagatcttt gctgtcatct	30120
ctgtgctgag ttttaataaac gctgagatca gaatctactg gggctcctgt cgccatcctg	30180
tgaacgccac cgtcttcacc caccgccacc agggccaggc gaacctcacc tgcggtctgc	30240
atcgaggaggc caagaagtac ctcacctggg acttcaacgg caccctctt gtggtttaca	30300
acagcttcga cggggacgga gtctccctga aagaccagct ctccggtctc agctactcca	30360
tccacaagaa caccaccctc caactcttcc ctccctacct gccgggaacc tacgagtgcg	30420
tcaccggccg ctgcaccac ctcaccgcc tgatcgtaaa ccagagcttt ccgggaacag	30480
ataactccct cttccccaga acaggaggtg agctcaggaa actccccggg gaccagggcg	30540
gagacgtacc ttcgaccctt gtgggggttag gattttttat taccgggttg ctggctcttt	30600
taatcaaagt ttccttgaga tttgttcttt ctttctacgt gtatgaacac ctcaacctcc	30660
aataactcta ccctttcttc ggaatcaggt gacttctctg aaatcgggct tgggtgtgctg	30720
cttactctgt tgattttttt cttatcata ctcagccttc tgtgcctcag gctcgccgcc	30780
tgctgcgcac acatctatat ctactgctgg ttgctcaagt gcaggggtcg ccaccaaga	30840
tgaacaggta catggtccta tcgatactag gcctgctggc cctggcggcc tgcagcgccg	30900
ccaaaaaaga gattaccttt gaggagccc cttgcaatgt aactttcaag cccgagggtg	30960
accaatgcac caccctcgtc aaatgcgtta ccaatcatga gaggctgcgc atcgactaca	31020
aaaacaaaac tggccagttt gcggtctata gtgtgtttac gcccggagac ccctctaact	31080
actctgtcac cgtcttcag ggcggacagt ctaagatatt caattacact ttcccttttt	31140
atgagttatg cgatgcggtc atgtacatgt caaaacagta caacctgtgg cctccctctc	31200
cccaggcgtg tgtggaaaat actgggtctt actgctgtat ggctttcgca atcactacgc	31260
tcgctctaata ctgcacgggtg ctatacataa aattcaggca gaggcgaatc tttatcgatg	31320
aaaagaaaat gccttgatcg ctaacaccgg ctttctatct gcagaatgaa tgcaatcacc	31380
tccctactaa tcaccaccac cctccttgcg attgcccattg gggtgacacg aatcgaagtg	31440

ccagtggggt ccaatgtcac catggtgggc cccgccggca attccaccct catgtgggaa	31500
aaatttgtcc gcaatcaatg ggttcatttc tgctctaacc gaatcagtat caagcccaga	31560
gccatctgcg atggggcaaaa tctaactctg atcaatgtgc aaatgatgga tgctgggtac	31620
tattacgggc agcggggaga aatcattaat tactggcgac cccacaagga ctacatgctg	31680
catgtagtcg aggcaattcc cactaccacc cccactacca cctctccac caccaccacc	31740
actactacta ctactactac tactactact actaccacta ccgctgcccc ccatacccg	31800
aaaagcacca tgattagcac aaagccccct cgtgctcact cccacgccgg cgggcccattc	31860
ggtgcgacct cagaaaccac cgagctttgc ttctgccaat gcactaacgc cagcgctcat	31920
gaactgttcg acctggagaa tgaggatgtc cagcagagct ccgcttgccct gacccaggag	31980
gctgtggagc ccgttgccct gaagcagatc ggtgattcaa taattgactc ttcttctttt	32040
gccactcccc aataccctcc cgattctact ttccacatca cgggtaccaa agaccctaac	32100
ctctctttct acctgatgct gctgctctgt atctctgtgg tctcttccgc gctgatgtta	32160
ctggggatgt tctgctgcct gatctgccgc agaaagagaa aagctcgctc tcagggccaa	32220
ccactgatgc ctttccccta ccccccggat tttgcagata acaagatatg agctcgctgc	32280
tgacactaac cgctttacta gcctgcgctc taacccttgt cgcttgcgac tcgagattcc	32340
acaatgtcac agctgtggca ggagaaaatg ttactttcaa ctccacggcc gatacccagt	32400
ggtcgtggag tggctcaggt agctacttaa ctatctgcaa tagctccact tccccggca	32460
tatccccaac caagtaccaa tgcaatgcca gcctgttcac cctcatcaac gcttccaccc	32520
tggacaatgg actctatgta ggctatgtac cttttggtgg gcaaggaaag acccacgctt	32580
acaacctgga agttcgccag cccagaacca ctaccaagc ttctcccacc accaccacca	32640
ccaccacat caccagcagc agcagcagca gcagccacag cagcagcagc agattattga	32700
ctttggtttt ggccagctca tctgccgcta cccaggccat ctacagctct gtgcccga	32760
ccactcagat ccaccgcca gaaacgacca ccgccaccac cctacacacc tccagcgatc	32820
agatgccgac caacatcacc cccttggtc ttcaaattggg acttacaagc cccactccaa	32880
aaccagtgga tgcggccgag gtctccgccc tcgtcaatga ctgggcgggg ctgggaatgt	32940
ggtggttcgc cataggcatg atggcgctct gcctgcttct gctctggctc atctgctgcc	33000
tccaccgcag gcgagccaga ccccccattc atagacccat cattgtcctg aaccccgata	33060

atgatgggat ccatagattg gatggcctga aaaacctact tttttctttt acagtatgat	33120
aaattgagac atgcctcgca ttttcttgta catgttcctt ctcccacctt ttctgggggtg	33180
ttctacgctg gccgctgtgt ctcacctgga ggtagactgc ctctcacctt tcaactgtcta	33240
cctgctttac ggattgggtca ccctcactct catctgcagc ctaatcacag taatcatcgc	33300
cttcatccag tgcattgatt acatctgtgt gcgcctcgca tacttcagac accacccgca	33360
gtaccgagac aggaacattg cccaacttct aagactgctc taatcatgca taagactgtg	33420
atctgccttc tgatcctctg catcctgccc accctcacct cctgccagta caccacaaaa	33480
tctccgcgca aaagacatgc ctctgcccgc ttcacccaac tgtggaatat acccaaatgc	33540
tacaacgaaa agagcgagct ctccgaagct tggctgtatg gggtcatctg tgtcttagtt	33600
ttctgcagca ctgtctttgc cctcataatc taccctact ttgatttggg atggaacgcg	33660
atcgatgcca tgaattacc cacttttccc gcacccgaga taattccact gcgacaagtt	33720
gtacccgttg tcgttaatca acgccccca tcccctacgc ccactgaaat cagctacttt	33780
aacctaacag gcggagatga ctgacgccct agatctagaa atggacggca tcagtaccga	33840
gcagcgtctc ctagagaggc gcaggcaggc ggctgagcaa gagcgcctca atcaggagct	33900
ccgagatctc gttaacctgc accagtgcaa aagaggcatc ttttgtctgg taaagcaggc	33960
caaagtcacc tacgagaaga ccggcaacag ccaccgcctc agttacaaat tgcccaccca	34020
gcgccagaag ctggtgctca tgggtgggtga gaatcccatc accgtcacc agcactcggt	34080
agagaccgag ggggtgtctgc actccccctg tcgggggtcca gaagacctct gcaccctggt	34140
aaagaccctg tgcggtctca gagatttagt cccctttaac taatcaaaca ctggaatcaa	34200
taaaaagaat cacttactta aaatcagaca gcaggtctct gtccagttta ttcagcagca	34260
cctccttccc ctctcccaa ctctggtact ccaaacgcct tctggcggca aacttcctcc	34320
acaccctgaa gggaatgtca gattcttgct cctgtccctc cgcaccact atcttcatgt	34380
tgttgagat gaagcgcacc aaaacgtctg acgagagctt caaccccgctg taccctatg	34440
acacggaaag cggccctccc tccgtccctt tcctcacccc tcccttcgtg tctccgatg	34500
gattccaaga aagtcccccc ggggtcctgt ctctgaacct ggccgagccc ctggtcactt	34560
cccacggcat gctcgccctg aaaatgggaa gtggcctctc cctggacgac gctggcaacc	34620
tcacctctca agatatcacc accgctagcc ctcccctcaa aaaaaccaag accaacctca	34680

gcctagaaac ctcaccccc ctaactgtga gcacctcagg cgccctcacc gtagcagccg	34740
ccgctcccct ggcggtggcc ggcacctccc tcaccatgca atcagaggcc cccctgacag	34800
tacaggatgc aaaactcacc ctggccacca aaggccccct gaccgtgtct gaaggcaaac	34860
tggccttgca aacatcggcc ccgctgacgg ccgctgacag cagcacctc acagtcagt	34920
ccacaccacc ccttagcaca agcaatggca gcttgggtat tgacatgcaa gccccattt	34980
acaccaccaa tggaaaacta ggacttaact ttggcgctcc cctgcatgtg gtagacagcc	35040
taaatgcact gactgtagtt actggccaag gtcttacgat aaacggaaca gccctacaaa	35100
ctagagtctc aggtgccctc aactatgaca catcaggaaa cctagaattg agagctgcag	35160
ggggtatgcg agttgatgca aatgggtcaac ttatccttga tgtagcttac ccatttgatg	35220
cacaaaacaa tctcagcctt aggcttggac agggaccctt gtttgttaac tctgccaca	35280
acttggatgt taactacaac agaggcctct acctgttcac atctggaaat accaaaaagc	35340
tagaagttaa tatcaaaaca gccaagggtc tcatttatga tgacactgct atagcaatca	35400
atgcgggtga tgggctacag tttgactcag gctcagatac aaatccatta aaaactaaac	35460
ttggattagg actggattat gactccagca gagccataat tgctaaactg ggaactggcc	35520
taagctttga caacacaggt gccatcacag taggcaacaa aaatgatgac aagcttacct	35580
tgtggaccac accagaccca tcccctaact gtagaatcta ttcagagaaa gatgctaaat	35640
tcacacttgt tttgactaaa tgcggcagtc aggtgttggc cagcgtttct gttttatctg	35700
taaaaggtag ctttgcgcc atcagtggca cagtaactag tgctcagatt gtcctcagat	35760
ttgatgaaaa tggagtctta ctaagcaatt cttcccttga ccctcaatac tggaactaca	35820
gaaaaggtag ctttacagag ggcactgcat ataccaacgc agtgggattt atgccaacc	35880
tcacagcata cccaaaaaca cagagccaaa ctgctaaaag caacattgta agtcaggttt	35940
acttgaatgg ggacaaatcc aaacccatga ccctcacat taccctcaat ggaactaatg	36000
aaacaggaga tgccacagta agcacttact ccatgtcatt ctcatggaac tggaatggaa	36060
gtaattacat taatgaaacg ttccaaacca actccttcac cttctcctac atcgcccaag	36120
aataaaaagc atgacgctgt tgatttgatt caatgtgttt ctgttttatt ttcaagcaca	36180
acaaaatcat tcaagtcatt cttccatctt agcttaatag acacagtagc ttaatagacc	36240
cagtagtgca aagccccatt ctagcttata actagtggag aagtactcgc ctacatgggg	36300

gtagagtc	aatcgtgc	caggatagg	cggtggtgc	gcagcagcg	gcgaataaac	36360
tgctgccg	gccgctcc	cctgcaggaa	tacaacatgg	cagtgggtctc	ctcagcgatg	36420
attcgcaccg	cccgcagcat	aaggcgcctt	gtcctccggg	cacagcagcg	caccctgatc	36480
tcacttaaat	cagcacagta	actgcagcac	agcaccacaa	tattgttcaa	aatcccacag	36540
tgcaaggcgc	tgtatccaaa	gctcatggcg	gggaccacag	aaccacgtg	gccatcatac	36600
cacaagcgca	ggtagattaa	gtggcgaccc	ctcataaaca	cgctggacat	aaacattacc	36660
tcttttggca	tgttgtaatt	caccacctcc	cggtaccata	taaacctctg	attaaacatg	36720
gcgccatcca	ccaccatcct	aaaccagctg	gccaaaacct	gcccgccggc	tatacactgc	36780
agggaaaccg	gactggaaca	atgacagtgg	agagcccagg	actcgtaacc	atggatcatc	36840
atgctcgtca	tgatatcaat	gttggcacaa	cacaggcaca	cgtgcataca	cttcctcagg	36900
attacaagct	cctcccgct	tagaaccata	tcccaggga	caaccattc	ctgaatcagc	36960
gtaaatccca	cactgcaggg	aagacctcgc	acgtaactca	cgttgtgcat	tgtcaaagtg	37020
ttacattcgg	gcagcagcgg	atgatcctcc	agtatggtag	cgcggtttc	tgtctcaaaa	37080
ggaggtagac	gatccctact	gtacggagtg	cgccgagaca	accgagatcg	tgttggctgt	37140
agtgtcatgc	caaatggaac	gccggacgta	gtcatatttc	ctgaagtctt	agatctctca	37200
acgcagcacc	agcaccaaca	cttcgcagtg	taaaaggcca	agtgccgaga	gagtatatat	37260
aggaataaaa	agtgacgtaa	acgggcaaag	tcaaaaaaac	gcccagaaaa	accgcacgcg	37320
aacctacgcc	ccgaaacgaa	agccaaaaaa	cactagacac	tcccttccgg	cgtaacttc	37380
cgctttccca	cgctacgtca	cttgccccag	tcaaacaaac	tacatatccc	gaacttccaa	37440
gtcgccacgc	ccaaaacacc	gcctacacct	ccccgcccgc	cggcccgcgc	ccaaacccgc	37500
ctcccgcccc	gcgccccgcc	ccgcgccgcc	catctcatta	tcatattggc	ttcaatccaa	37560
aataaggat	attattgatg	atggtttaaa	cggatcctct	agagtcgacc	tgaggcatg	37620
caagcttgag	tataaccccc	ttgcggccgc	ccgggccgtc	gaccaattct	catgtttgac	37680
agcttatcat	cgaatttctg	ccattcatcc	gcttattatc	acttattcag	gcgtagcaac	37740
caggcgttta	agggcaccaa	taactgcctt	aaaaaaatta	cgccccgcgc	tgccactcat	37800
cgcagtactg	ttgtaattca	ttaagcattc	tgccgacatg	gaagccatca	caaacggcat	37860
gatgaacctg	aatcgccagc	ggcatcagca	ccttgtcgcc	ttgcgtataa	tatttgccca	37920

tggtgaaaac	gggggcgaag	aagttgtcca	tattggccac	gtttaaatca	aaactggtga	37980
aactcaccca	gggattggct	gagacgaaaa	acatattctc	aataaacctt	ttagggaaat	38040
aggccagggt	ttcaccgtaa	cacgccacat	cttgccaata	tatgtgtaga	aactgccgga	38100
aatcgtcgtg	gtattcactc	cagagcgatg	aaaacgtttc	agtttgctca	tggaaaacgg	38160
tgaacaagg	gtgaacacta	tcccatatca	ccagctcacc	gtctttcatt	gccatacggg	38220
attccggatg	agcattcatc	aggcgggcaa	gaatgtgaat	aaaggccgga	taaaacttgt	38280
gcttattttt	ctttacggtc	tttaaaaagg	ccgtaatatc	cagctgaacg	gtctggttat	38340
aggtagattg	agcaactgac	tgaaatgcct	caaaatgttc	tttacgatgc	cattgggata	38400
tatcaacggg	ggtatatcca	gtgatttttt	tctccatttt	agcttcctta	gctcctgaaa	38460
atctcgataa	ctcaaaaaat	acgcccggta	gtgatcttat	ttcattatgg	tgaaagttgg	38520
aacctcttac	gtgccgatca	acgtctcatt	ttcgccaaaa	gttggccag	ggcttcccgg	38580
tatcaacagg	gacaccagga	tttattttat	ctgcgaagtg	atcttccgtc	acaggtattt	38640
attcgcgata	agctcatgga	gcggcgtaac	cgtcgcacag	gaaggacaga	gaaagcgcg	38700
atctgggaag	tgacggacag	aacggtcagg	acctggattg	gggaggcggt	tgccgccgct	38760
gctgctgacg	gtgtgacgtt	ctctgttccg	gtcacaccac	atacgttccg	ccattcctat	38820
gcgatgcaca	tgctgtatgc	cggtataccg	ctgaaagtcc	tgcaaagcct	gatgggacat	38880
aagtccatca	gttcaacgga	agtctacacg	aaggtttttg	cgctggatgt	ggctgcccgg	38940
caccgggtgc	agtttgcatg	gccggagtct	gatgcggttg	cgatgctgaa	acaattatcc	39000
tgagaataaa	tgccctggcc	tttatatgga	aatgtggaac	tgagtggata	tgctgttttt	39060
gtctgttaaa	cagagaagct	ggctgttatc	cactgagaag	cgaacgaaac	agtcgggaaa	39120
atctcccatt	atcgtagaga	tccgcattat	taatctcagg	agcctgtgta	gcgtttatag	39180
gaagtagtgt	tctgtcatga	tgccctgcaag	cggtaacgaa	aacgatttga	atatgccttc	39240
aggaacaata	gaaatcttcg	tgccgtgtta	cgttgaagtg	gagcggatta	tgctcagcaat	39300
ggacagaaca	acctaataaa	cacagaacca	tgatgtggtc	tgctccttta	cagccagtag	39360
tgctcgccgc	agtcgagcga	cagggcgaag	ccctcgagtg	agcgaggaag	caccagggaa	39420
cagcacttat	atattctgct	tacacacgat	gcctgaaaaa	acttcccttg	gggttatcca	39480
cttatccacg	gggatatttt	tataattatt	ttttttatag	tttttagatc	ttctttttta	39540

gagcgccttg taggccttta tccatgctgg ttctagagaa ggtgttgtga caaattgccc	39600
tttcagtgtg acaaatcacc ctcaaagac agtcctgtct gtgacaaatt gcccttaacc	39660
ctgtgacaaa ttgccctcag aagaagctgt tttttcacia agttatccct gcttattgac	39720
tcttttttat ttagtgtgac aatctaataa cttgtcacac ttcacatgga tctgtcatgg	39780
cggaaacagc ggttatcaat cacaagaaac gtaaaaatag cccgcgaatc gtccagtcaa	39840
acgacctcac tgaggcggca tatagtctct cccgggatca aaaacgtatg ctgtatctgt	39900
tcgttgacca gatcagaaaa tctgatggca ccctacagga acatgacggg atctgcgaga	39960
tccatgttgc taaatatgct gaaatattcg gattgacctc tgcggaagcc agtaaggata	40020
tacggcaggc attgaagagt ttcgcgggga aggaagtggg tttttatcgc cctgaagagg	40080
atgccggcga tgaaaaaggc tatgaatctt ttccttggtt tatcaaactg gcgcacagtc	40140
catccagagg gctttacagt gtacatatca acccatatct cattcccttc tttatcgggt	40200
tacagaaccg gtttacgcag tttcggctta gtgaaacaaa agaaatcacc aatccgtatg	40260
ccatgcgttt atacgaatcc ctgtgtcagt atcgtaagcc ggatggctca ggcatcgtct	40320
ctctgaaaat cgactggatc atagagcgtt accagctgcc tcaaagttac cagcgtatgc	40380
ctgacttccg ccgccgcttc ctgcaggctt gtgttaatga gatcaacagc agaactccaa	40440
tgcgcctctc atacattgag aaaaagaaaag gccgccagac gactcatatc gtattttcct	40500
tccgcgatat cacttccatg acgacaggat agtctgaggg ttatctgtca cagatttgag	40560
gggtggttcgt cacatttggt ctgacctact gagggtaatt tgtcacagtt ttgctgtttc	40620
cttcagcctg catggatttt ctcatatctt ttgaactgta atttttaagg aagccaaatt	40680
tgagggcagt ttgtcacagt tgatttcctt ctctttccct tcgtcatgtg acctgatatc	40740
gggggttagt tcgtcatcat tgatgagggt tgattatcac agttttattac tctgaattgg	40800
ctatccgcgt gtgtacctct acctggagtt tttccacagg tggatatctt tctttgcgct	40860
gagcgtaaag gctatctgac agaacagttc ttctttgctt cctcgccagt tcgctcgcta	40920
tgctcgggta cacggctgcg gcgagcgcta gtgataataa gtgactgagg tatgtgctct	40980
tcttatctcc tttttagtg ttgctcttat tttaaacaac tttgcggttt tttgatgact	41040
ttgcgatttt gttgttgctt tgcagtaaag tgcaagattt aataaaaaaa cgcaaagcaa	41100
tgattaaagg atgttcagaa tgaaactcat ggaaacactt aaccagtgc taaacgctgg	41160

tcatgaaatg acgaaggcta tcgccattgc acagtttaat gatgacagcc cggaagcgag	41220
gaaaataacc cggcgctgga gaataggtga agcagcggat ttagttgggg tttctttctca	41280
ggctatcaga gatgccgaga aagcagggcg actaccgcac ccggatatgg aaattcgagg	41340
acgggttgag caacgtgttg gttatacaat tgaacaaatt aatcatatgc gtgatgtgtt	41400
tggtacgca ttgcgacgtg ctgaagacgt atttccaccg gtgatcgggg ttgctgcca	41460
taaaggtggc gtttacaaaa cctcagtttc tgttcattctt gctcaggatc tggctctgaa	41520
ggggctacgt gttttgctcg tggaaggtaa cgacccccag ggaacagcct caatgtatca	41580
cggatgggta ccagatcttc atattcatgc agaagacact ctctgcctt tctatcttgg	41640
ggaaaaggac gatgtcactt atgcaataaa gccacttgc tggccggggc ttgacattat	41700
tccttcctgt ctggctctgc accgtattga aactgagtta atgggcaaatt ttgatgaagg	41760
taaactgccc accgatccac acctgatgct ccgactggcc attgaaactg ttgctcatga	41820
ctatgatgtc atagttattg acagcgcgcc taacctgggt atcggcacga ttaatgtcgt	41880
atgtgctgct gatgtgctga ttgttccac gcctgctgag ttgtttgact acacctccgc	41940
actgcagttt ttcgatatgc ttcgtgatct gctcaagaac gttgatctta aagggttcga	42000
gcctgatgta cgtattttgc ttaccaaata cagcaatagt aatggctctc agtccccgtg	42060
gatggaggag caaattcggg atgcctgggg aagcatggtt ctaaaaaatg ttgtacgtga	42120
aacggatgaa gttggtaaag gtcagatccg gatgagaact gtttttgaac aggccattga	42180
tcaacgctct tcaactgggtg cctggagaaa tgctctttct atttgggaac ctgtctgcaa	42240
tgaaattttc gatcgtctga ttaaaccacg ctgggagatt agataatgaa gcgtgcgcct	42300
gttattccaa aacatacgct caatactcaa ccggttgaag atacttcgtt atcgacacca	42360
gctgccccga tgggtggattc gttaattgcg cgcgtaggag taatggctcg cggtaatgcc	42420
attactttgc ctgtatgtgg tcgggatgtg aagtttactc ttgaagtgct ccggggtgat	42480
agtgttgaga agacctctcg ggtatggtca ggtaatgaac gtgaccagga gctgcttact	42540
gaggacgcac tggatgatct catcccttct tttctactga ctggtcaaca gacaccggcg	42600
ttcggtcgaa gagtatctgg tgtcatagaa attgccgatg ggagtcgccg tcgtaaagct	42660
gctgcactta ccgaaagtga ttatcgtgtt ctggttggcg agctggatga tgagcagatg	42720
gctgcattat ccagattggg taacgattat cgcccaacaa gtgcttatga acgtggtcag	42780

cgttatgcaa gccgattgca gaatgaat	42840
tttctgcgct ggctgatgcg	
gaaaatattt cacgtaagat tattacccgc	42900
tgtatcaaca cgcctaaatca	
gttggtgctc ttttttctca ccccggtgaa	42960
ctatctgccc ggtcaggtga tgcacttcaa	
aaagccttta cagataaaga ggaattactt	43020
aagcagcagg catctaacct tcatgagcag	
aaaaaagctg gggatgatatt tgaagctgaa	43080
gaagttatca ctcttttaac ttctgtgctt	
aaaacgtcat ctgcatcaag aactagttta	43140
agctcacgac atcagtttgc tcctggagcg	
acagtattgt ataagggcga taaaatgggtg	43200
cttaacctgg acaggtctcg tgttccaact	
gagtgtatag agaaaattga ggccattctt	43260
aaggaacttg aaaagccagc accctgatgc	
gaccacgttt tagtctacgt ttatctgtct	43320
ttacttaatg tcctttgtta caggccagaa	
agcataactg gcctgaatat tctctctggg	43380
cccactgttc cacttgtatc gtcggtctga	
taatcagact gggaccacgg tcccactcgt	43440
atcgctcggtc tgattattag tctgggacca	
cgggtcccact cgtatcgtcg gtctgattat	43500
tagtctggga ccacgggtccc actcgtatcg	
tcggtctgat aatcagactg ggaccacggg	43560
cccactcgta tcgtcggtct gattattagt	
ctgggaccat ggtcccactc gtatcgtcgg	43620
tctgattatt agtctgggac cacgggtcca	
ctcgtatcgt cggctctgatt attagtctgg	43680
aaccacggtc ccactcgtat cgtcggtctg	
attattagtc tgggaccacg gtcccactcg	43740
tatcgtcggt ctgattatta gtctgggacc	
acgatcccac tcgtgttgct ggtctgatta	43800
tcggtctggg accacgggtcc cacttgtatt	
gtcgatcaga ctatcagcgt gagactacga	43860
ttccatcaat gcctgtcaag ggcaagtatt	
gacatgtcgt cgtaacctgt agaacggagt	43920
aacctcggtg tgcggttgta tgcctgctgt	
ggattgctgc tgtgtcctgc ttatccacaa	43980
cattttgcgc acggttatgt ggacaaaata	
cctggttacc caggccgtgc cggcacgctc	44035
ggtaccggg gatcctcggtt taaac	

<210> 51

<211> 41464

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<220>

<221> modified_base

<222> (16063)..(16063)

<223> a, c, t, g, unknown or other

<400> 51

catcatcaat aatatacctt attttggatt gaagccaata tgataatgag atgggcggcg	60
cggggcgggg cgcgggcggg gaggcgggtt tggggcgggg ccggcgggcg gggcggtgtg	120
gcggaagtgg actttgtaag tgtggcggat gtgacttgct agtgccgggc gcggtaaaag	180
tgacgttttc cgtgcgcgac aacgcccccg ggaagtgaca tttttccgc ggtttttacc	240
ggatgttgta gtgaatttgg gcgtaaccaa gtaagatttg gccattttcg cgggaaaact	300
gaaacgggga agtgaaatct gattaatttt gcgttagtca taccgcgtaa tatttgtcta	360
gggccgaggg actttggccg attacgtgga ggactcgccc aggtgttttt tgaggtgaat	420
ttccgcgttc cgggtcaaag tctgcgtttt attattatag gatatcccat tgcatacgtt	480
gtatccatat cataatatgt acatttatat tggctcatgt ccaacattac cgccatgttg	540
acattgatta ttgactagtt attaatagta atcaattacg gggtcattag ttcatagccc	600
atatatggag ttccgcgtta cataacttac ggtaaattggc ccgcctggct gaccgcccaa	660
cgacccccgc ccattgacgt caataatgac gtatgttccc atagtaacgc caatagggac	720
ttccattga cgtcaatggg tggagtattt acggtaaact gccacttg cagtacatca	780
agtgtatcat atgccaagta cggcccctat tgacgtcaat gacggtaaatt ggccgcctg	840
gcattatgcc cagtacatga cttatggga ctttcctact tggcagtaca tctacgtatt	900
agtcacgct attaccatgg tgatgcggtt ttggcagtac atcaatgggc gtggatagcg	960
gtttgactca cggggatttc caagtctcca cccattgac gtcaatggga gtttgttttg	1020
gcacaaaaat caacgggact ttccaaaatg tcgtaacaac tccgccccat tgacgcaa	1080
gggcggtagg cgtgtacggt gggagggtcta tataagcaga gctctcccta tcagtgatag	1140
agatctccct atcagtgata gagatcgtcg acgagctcgt ttagtgaacc gtcagatcgc	1200
ctggagacgc catccacgct gttttgacct ccatagaaga caccgggacc gatccagcct	1260
ccgcggccgg gaacggtgca ttggaacgcg gattccccgt gccaagagtg agatcttccg	1320
tttatctagg taccagatat cgccaccatg agacctgctc cctggacacc taatcctccc	1380
aggtcccca gccagatgag cgtgagagac agactggcta ggctgagagc cgaggctcag	1440

gtcaagcagg ccagcgtcga ggtgcaaccc cctcagctca cccaggtgtc cccccagcag	1500
cctgtggccg gcattctgtt cattctggcc attctgaccg agtggggaag cggcaacaga	1560
acctacggcc ctgtcttcat gtgcctcgga ggactgctga caatggtggc tggcgccgtg	1620
tggctcaccg tcatgtccaa caccctgctc agcgcctgga ttctgaccgc cggattcctg	1680
atctttctga tcggattcgc tctctttggc gtcactcaggt gttgcaggta ctgttgctac	1740
tactgcctga ccctcgagag cgaggaaaga cccccaccc cctacaggaa tacagtgagg	1800
aaacctcagc agcccagag cctcgaggag tgcgatagcg agctggagat taaaaggtat	1860
aagaataggg tggcctccag gaagtgtagg gctaaattca aacagctcct gcaacactat	1920
agggagtgg ccgccgcaa gtccagcgag attagggaca gaaggaggaa tcctgcctcc	1980
aggagagacc aggccaaatg gagactcaa acactcgccg ctggatggcc catgggctac	2040
caggcctata gtcctggat gtacagctac accgaccatc agacaacacc caccttcgtg	2100
catctgcagg ctacactggg ctgcaccgga ggcagaaggt gtcacgtgtt tctgggaatc	2160
gtgctgttca tctttggatg cctgctcgtg ctgggcatct ggatttatct cctggagatg	2220
ctctggagac tcggcgctac aatttggcag ctgctcgctt tttttctggc cttctttctg	2280
gacctgatcc tcctgatcat cgccctgtac ctccaacaga actggtggac ctccttggtg	2340
gatctgctgt ggctcctcct cttcctggcc atcctgatct ggatgtacta ccatggccag	2400
agaggaaggg tcgcttgctc tcctgtccct gtcctgctg gccccatcgt gaggccttgg	2460
gagccttccc tcacacaggc cgccggccag gcctttgctc ccgtgaggcc ccagcacatg	2520
cctgtggaac ccgtgcccgt ccccacagtg gctctggaaa ggccctgtgta cccaagccc	2580
gtgagacctg tcctctggct cagcagccct ggaggactcg gaacactcgg agccgctctc	2640
ctgacactgg ccgctgctct ggctctgctg gctagcctga tcctgggaac cctcaacctc	2700
accacatgt ttctcctcat gtcctgtgg accctcgtgg tgctgctcat ctgttccagc	2760
tgctccagct gccccctgag caagatcctg ctggccaggc tgttcctgta cgccctcgcc	2820
ctcctgctgc tggctagcgc cctgatcgt ggcggaagca tcctccagac caatttcaag	2880
agcctctcct ccaccgagtt catccccaac ctgttctgta tgttactgct gatccatagc	2940
gacgagcacc atcatgacga ctccctgccc catcctcagc aggccacaga cgactccggc	3000
cacgagagcg acagcaatag caatgagggc aggcaccatc tgctcgtgtc cggagctcaa	3060

gtccccgagc ctccccacat ccatctcgcc gcccagggaa tggcttacct cctccacgag	3120
cagcacggca tggccccttg tcccgtcgct caagcccccc ctacacctct gccctttttc	3180
gccatttgtc tgacctggag aatcgaggac ccccccttca acagcctgct gttcgccctg	3240
ctcgccgccg ctggcggcct ccagggcatt tacgtcctcg tgatgctggt gctgctgac	3300
ctcgcttaca ggagaagatg gaggagactg acagtgtgcg gcggcatcat gtttctcgcc	3360
tgcgtcctgg tcctgatcgt ggacgccgtc ctgcaactca gccccctcct gggagctgtg	3420
acagtgggtc ccatgaccct gctgctgctg gccttcaacg gacccacga tcctctgccc	3480
caagatcctg acaataccga cgataacggc cccaagacc ccgataacac cgacgacaat	3540
ggccctcacg accctctgcc ccatagccct tccgatagcg ctggcaacga tggcggccct	3600
cctcagctga cagaggaggt ggaaaataag ggcggcgatc agggaccccc cctgatgaca	3660
gatggcggag gaggacacag ccatgatagc ggacatggcg gaggcgatcc ccatctgcct	3720
accctcctcc tgggcagctc cggttctgga ggcgacgatg atgaccctca cggccctgtg	3780
cagctctcct actacgacgg caaaaggacc gaacaaggaa aagaggctcct ggagaaggcc	3840
aggggcagca catacgaac ccccaggcct cccatgtccg attggaccgg aggagccctg	3900
ctggtcctct acagcttcgc cctgatgctg atcattatca tcctgatcat ctttatcttc	3960
agaagggacc tgctgtgccc tctcggcgcc ctgtgcatcc tgctgctcat gatcacactc	4020
ctcctgatcg ccctctggaa cctgcacgga caagccctga tgtccgatga gggacctgga	4080
acaggacccg gaaacggact gggcgagaag ggagatacaa gcggccccga aggcagcggc	4140
ggaagcggac cccaaagaag gggcggcgac aaccacggaa gaggaagagg caggggcaga	4200
ggcagaggag gaggaagacc tggagcccct ggcggttctg gaagcggacc caggcacagg	4260
gacggagtga ggaggcctca aaaaagacc agctgcatcg gctgcaaggg aaccactgg	4320
attgatgata acccctccac agagaccgct caggcctgga acgccggctt cctgagggga	4380
agagcctatg gcatcgatct gctgaggacc gagggcgaac acgtggaggg agccaccgga	4440
gagacaaggg aggaaagcga agacacagaa agcgatggcg acgacgaaga cctgccctgc	4500
attgtgtcca ggggcggacc caaggtgaag aggcccccta tctttatcag aaggctccat	4560
agactgctcc tgatgagggc catgaaccct gtgtgcctgc ccgtgatcgt ggccccctac	4620
ctcttttggc tggccgcat tgccgctagc tgcttcaccg cctccgtgtc cacagtgggtg	4680

acagccaccg gcctcgccct gagcctgctg ctctctgctg ccgtggcctc cagctacgcc	4740
gctgctcaaa gaaagctcct gaccctgtc accgtcctga cagccgtcgt gaccaccttt	4800
tccgctggca cttcaagct gcctaggtgc acacctggcg acaggcagtg gctctacgtg	4860
cagagctccg tgggcaatat tgtgcagagc tgcaatccca ggtacagcat ttttttcgac	4920
tacatggcca tccataggtc cctcaccaag atctgggagg atctgggagg cccttcccag	4980
gctcctctgc cctgcgtgct gtggcctgtg ctgcctgagc ctctgccccca aggccagctg	5040
acagcctatc acgtgtccac cgctcctaca ggttcttggg tcagcgctcc ccagcccgtc	5100
cccgaaaacg cttaccaggc ttacgccgcc cccagctgt tccccgtctc cgacatctga	5160
tgatgagcgg ccgcgatctg ctgtgccttc tagttgccag ccatctgttg tttgcccctc	5220
ccccgtgcct tccttgacct tggaaggtgc cactcccact gtcctttcct aataaaatga	5280
ggaaattgca tcgcattgtc tgagtaggtg tcattctatt ctgggggggtg ggggtggggca	5340
ggacagcaag ggggaggatt gggaagacaa tagcaggcat gctggggatg cgggtgggctc	5400
tatggccgat cagcgatcgc tgaggtgggt gagtgggcgt ggcctgggggt ggtcatgaaa	5460
atatataagt tgggggtctt agggctctctt tatttgtgtt gcagagaccg ccggagccat	5520
gagcgggagc agcagcagca gcagtagcag cagcgccttg gatggcagca tcgtgagccc	5580
ttatttgacg acgcggatgc cccactgggc cgggggtgcgt cagaatgtga tgggctccag	5640
catcgacggc cgacctgtcc tgcccgcaaa ttccgccacg ctgacctatg cgaccgtcgc	5700
ggggacgccg ttggacgcca ccgccgccgc cgccgccacc gcagccgcct cggccgtgcg	5760
cagcctggcc acggactttg cattcctggg accactggcg acaggggcta cttctcgggc	5820
cgctgctgcc gccgttcgcg atgacaagct gaccgccctg ctggcgcagt tggatgcgct	5880
tactcgggaa ctgggtgacc tttctcagca ggtcatggcc ctgcgccagc aggtctcctc	5940
cctgcaagct ggcgggaatg cttctccac aaatgccgtt taagataaat aaaaccagac	6000
tctgtttgga ttaaagaaaa gtagcaagtg cattgctctc tttatttcat aattttccgc	6060
gcgcgatagg ccctagacca gcgttctcgg tcgttgaggg tgcggtgtat cttctccagg	6120
acgtggtaga ggtggctctg gacgttgaga tacatgggca tgagcccgtc ccgggggtgg	6180
aggtagcacc actgcagagc ttcatgctcc ggggtggtgt tgtagatgat ccagtcgtag	6240
caggagcgct gggcatggtg cctaaaaatg tccttcagca gcaggccgat ggccaggggg	6300

aggcccttgg tgtaagtgtt tacaaaaacgg ttaagttggg aagggtgcat tcggggagag	6360
atgatgtgca tcttggactg tatttttaga ttggcgatgt ttccgcccag atcccttctg	6420
ggattcatgt tgtgcaggac caccagtaca gtgtatccgg tgcacttggg gaatttgtca	6480
tgcagcttag agggaaaagc gtggaagaac ttggagacgc ctttgtggcc tcccagattt	6540
tccatgcatt cgtccatgat gatggcaatg ggcccgcggg aggcagcttg ggcaaagata	6600
tttctgggggt cgctgacgtc gtagttgtgt tccaggggtga ggtcgtcata ggccattttt	6660
acaaagcgcg ggcggagggt gcccgactgg gggatgatgg tcccctctgg ccctggggcg	6720
tagttgccct cgcagatctg catttcccag gccttaatct cggagggggg aatcatatcc	6780
acctgcgggg cgatgaagaa aacggtttcc ggagccgggg agattaactg ggatgagagc	6840
aggtttctaa gcagctgtga ttttccacaa ccggtggggc cataaataac acctataacc	6900
ggttgacgct ggtagtttag agagctgcag ctgccgtcgt cccggaggag gggggccacc	6960
tcgttgagca tgtccctgac gcgcatgttc tccccgacca gatccgccag aaggcgtcgc	7020
ccgcccaggg acagcagctc ttgcaaggaa gcaaagtttt tcagcggctt gaggccgtcc	7080
gccgtgggca tgtttttcag ggtctggctc agcagctcca ggcggtcca gagctcggtg	7140
acgtgctcta cggcatctct atccagcata tctcctcgtt tcgcgggttg gggcgacttt	7200
cgctgtaggg caccaagcgg tggctgtcca gcggggccag agtcatgtcc ttccatgggc	7260
gcagggtcct cgtcagggtg gtctgggtca cgggtgaaggg gtgcgctccg ggctgagcgc	7320
ttgccaagggt gcgcttgagg ctggttctgc tgggtgctgaa gcgctgccgg tcttcgcctt	7380
gcgcgtcggc caggtagcat ttgaccatgg tgtcatagtc cagcccctcc gcggcgtgtc	7440
ccttggcgcg cagcttgccc ttggaggtgg cgccgcacga ggggcagagc aggctcttga	7500
gcgcgtagag cttggggggc aggaagaccg attcggggga gtaggcgtcc gcgccgcaga	7560
ccccgcacac ggtctcgcac tccaccagcc aggtgagctc ggggcgcgcc ggggtcaaaaa	7620
ccaggtttcc cccatgcttt ttgatgcgtt tcttacctcg ggtctccatg aggtggtgtc	7680
cccgtcgggt gacgaagagg ctgtccgtgt ctccgtagac cgacttgagg ggtcttttct	7740
ccaggggggt ccctcggctt tcctcgtaga ggaactcgga ccactctgag acgaaggccc	7800
gcgtccaggc caggacgaag gaggctatgt gggaggggta gcggtcgttg tccactaggg	7860
ggtccacctt ctccaagggt tgaagacaca tgtcgccttc ctcggcgtcc aggaagggtga	7920

ttggcttgta ggtgtaggcc acgtgaccgg gggttcctga cgggggggta taaaaggggg	7980
tgggggcgcg ctcgctgtca ctctcttccg catcgctgtc tgcgagggcc agctgctggg	8040
gtgagtattc cctctcgaag gcgggcatga cctccgcgct gaggttgtca gtttccaaaa	8100
acgaggagga tttgatgttc acctgtcccg aggtgatacc tttgagggta cccgcgtcca	8160
tctggtcaga aaacacgatc tttttattgt ccagcttggg ggcgaaacgac ccgtagaggg	8220
cgttggagag cagcttggcg atggagcgca gggctctgggt cttgtccctg tcggcgcgct	8280
ccttggccgc gatgttgagc tgcacgtact cgcgcgcgac gcagcgccac tcggggaaga	8340
cggtggtgcg ctcgtcgggc accaggcgca cgcgccagcc gcggttgtgc aggggtgacca	8400
ggttccacgct ggtggcgacc tcgccgcgca ggcgctcggt ggtccagcag agacggccgc	8460
ccttgcgcga gcagaagggg ggcaggggggt cgagctgggt ctcgtcggg gggtcgcgct	8520
ccacggtgaa aaccccgggg cgcaggcgcg cgtcgaagta gtctatcttg caaccttgca	8580
tgtccagcgc ctgctgccag tcgcgggchg cgagcgcgcg ctcgtagggg ttgagcggcg	8640
ggccccaggg catggggtgg gtgagtgcgg aggcgtacat gccgcagatg tcatagacgt	8700
agaggggctc ccgcaggacc ccgatgtagg tggggtagca gcggcccgcc cggatgctgg	8760
cgcgcacgta gtcatacagc tcgtgcgagg gggcgaggag gtcggggccc aggttggtgc	8820
gggcggggcg ctccgcgcgg aagacgatct gcctgaagat ggcatgcgag ttggaagaga	8880
tgggtggggcg ctggaagacg ttgaagctgg cgtcctgcag gccgacggcg tcgcgcacga	8940
aggaggcgta ggagtcgcgc agcttgtgta ccagctcggc ggtgacctgc acgtcgagcg	9000
cgcagtagtc gaggtctcg cggatgatgt catatttagc ctgccccttc tttttccaca	9060
gctcgcggtt gaggacaaac tcttcgcggt ctttccagta ctcttgatc gggaaaccgt	9120
ccggttccga acggtaagag cctagcatgt agaactgggt gacggcctgg taggcgcagc	9180
agcccttctc cacggggagg gcgtaggcct gcgcggcctt gcggagcgag gtgtgggtca	9240
gggcgaagggt gtccctgacc atgactttga ggtactgggt cttgaagtcg gagtcgtcgc	9300
agccgccccg ctcccagagc gagaagtcgg tgcgcttctt ggagcggggg ttgggcagag	9360
cgaaggtagc atcgttgaag aggattttgc ccgcgcgggg catgaagttg cgggtgatgc	9420
ggaaggggccc cggcacttca gagcggttgt tgatgacctg ggcggcgagc acgatctcgt	9480
cgaagccgtt gatgttgtgg cccacgatgt agagttccag gaagcggggc cggcccttta	9540

cgggtgggcag cttcttttagc tcttcgtagg tgagctcctc gggcgaggcg aggccgtgct	9600
cggccagggc ccagtccgcg aggtgcgggt tgtctctgag gaaggacttc cagaggtcgc	9660
gggccaggag ggtctgcagg cggctcttga aggtcctgaa ctggcggccc acggccatth	9720
tttcgggggt gatgcagtag aaggtgaggg ggtcttgctg ccagcgggtcc cagtcgagct	9780
gcagggcgag gtcgcgcgcg gcggtgacca ggcgctcgtc gccccgaat ttcatgacca	9840
gcatgaaggg cacgagctgc tttccgaagg ccccatcca agtgtaggtc tctacatcgt	9900
aggtgacaaa gaggcgctcc gtgcgaggat gcgagccgat cggaagaac tggatctccc	9960
gccaccagtt ggaggagtgg ctgttgatgt ggtggaagta gaagtcccgt cgccgggccc	10020
aacactcgtg ctggcttttg taaaagcgag cgcagtactg gcagcgtgc acgggctgta	10080
cctcatgcac gagatgcacc tttcgccgc gcacaggaa gccgagggga aatctgagcc	10140
ccccgcctgg ctgcggcat ggctggttct cttctacttt ggatgcgtgt ccgtctccgt	10200
ctggctcctc gaggggtgth acggtggagc ggaccaccac gccgcgcgag ccgcaggtcc	10260
agatatcggc gcgcggcgggt cggagtttga tgacgacatc gcgcagctgg gagctgtcca	10320
tggtctggag ctcccgcggc ggcggcaggt cagccgggag ttcttgagg ttcacctgc	10380
agagtcgggc cagggcgcg ggaggtcta ggtggtacct gatctctagg ggcgtgttg	10440
tggcggcgtc gatggcttgc aggagcccgc agccccgggg ggcgacgacg gtgccccgcg	10500
gggtggtggt ggtggtggcg gtgcagctca gaagcgggtc gcggggcggg cccccggagg	10560
tagggggggc tccggtccc cgggcagggg cggcagcggc acgtcggcgt ggagcgcggg	10620
caggagtgg tgctgtgccc ggaggttgct ggcgaaggcg acgacgcggc ggttgatctc	10680
ctggatctgg cgcctctgcg tgaagacgac gggcccgggt agcttgaacc tgaaagagag	10740
ttcgacagaa tcaatctcgg tgtcattgac gcgggcctgg cgcaggatct cctgcacgtc	10800
tcccgagttg tcttggtagg cgatctcggc catgaactgc tcgatctctt cctcctggag	10860
gtctccgcgt ccggcgcgth ccacggtggc cgccaggtcg ttggagatgc gccccatgag	10920
ctgcgagaag gcgttgagtc cgccctcgtt ccagactcgg ctgtagacca cggccccctg	10980
gtcatcgcgg gcgcgcatga ccacctgcgc gaggttgagc tccacgtgcc gcgcgaagac	11040
ggcgtagttg cgagacgct ggaagaggta gttgaggggt gtggcgggtgt gctcgccac	11100
gaagaagttc atgaccagc ggcgcaacgt ggattcgttg atgtcccca aggcctccag	11160

ccgttccatg gcctcgtaga agtccacggc gaagttgaaa aactgggagt tgcgcgccga	11220
cacggtcaac tcctcctcca gaagacggat gagctcggcg acggtgtcgc gcacctcgcg	11280
ctcgaaggct atgggggatct cttcctccgc tagcatcacc acctcctcct cttcctcctc	11340
ttctggcact tccatgatgg cttcctcctc ttcggggggt ggcggcggcg gcggtggggg	11400
agggggcgct ctgcgccggc ggcggcgcac cgggagggcg tccacgaagc gcgcgatcat	11460
ctccccgcgg cggcggcgca tgggtctcggg gacggcgcgg ccgttctccc gggggcgag	11520
ttggaagacg ccgccggaca tctgggtgctg gggcggggtg ccgtgaggca gcgagacggc	11580
gctgacgatg catctcaaca attgctgcgt aggtacgccg ccgagggacc tgagggagtc	11640
catatccacc ggatccgaaa acctttcgag gaaggcgtct aaccagtcgc agtcgcaagg	11700
taggctgagc accgtggcgg gcggcggggg gtggggggag tgtctggcgg aggtgctgct	11760
gatgatgtaa ttgaagtagg cggacttgac acggcggatg gtcgacagga gcacctgtc	11820
cttgggtccg gcctgctgga tgcggaggcg gtcggctatg cccagggctt cgttctggca	11880
tcggcgagg tccttgtagt agtcttgcat gagcctttcc accggcacct cttctccttc	11940
ctcttctgct tcttccatgt ctgcttcggc cctggggcgg cgccgcgccc ccctgcccc	12000
catgcgcgtg accccgaacc ccctgagcgg ttggagcagg gccaggtcgg cgacgacgcg	12060
ctcggccagg atggcctgct gcacctgcgt gagggtggtt tggaagtcac ccaagtccac	12120
gaagcgggtg taggcgccc tggtgatggt gtaggtgcag ttggccatga cggaccagtt	12180
gacggtctgg tggcccgggt gcgacatctc ggtgtacctg agtcgcgagt aggcgcggga	12240
gtcgaagacg tagtcgttg aagtccgcac caggtactgg tagcccacca ggaagtgcgg	12300
cggcggctgg cggtagaggg gccagcgag ggtggcgggg gctccggggg ccaggtcttc	12360
cagcatgagg cggtggtagg cgtagatgta cctggacatc caggtgatac ccgcggcgg	12420
ggtggaggcg cgcggaagt gcgcacccg gttccagatg ttgcgcagg gcagaaagt	12480
ctccatggta ggcgtgctct gtccagtcag acgcgcgag tcgttgatac tctagaccag	12540
ggaaaacgaa agccggtcag cgggcactct tccgtggtct ggtgaataga tcgcaagggt	12600
atcatggcgg agggcctcgg ttcgagcccc ggtccgggc cggacgggtc gccatgatcc	12660
acgcggttac cgcccgcgt tcgaaccag gtgtgcgac tcagacaac gtggagtgtt	12720
ccttttggcg tttttctggc cgggcgccgg cgccgcgtaa gagactaagc cgcgaaagcg	12780

aaagcagtaa gtggctcgct ccccgtagcc ggagggatcc ttgctaaggg ttgcgttgcg	12840
gcgaaccccc gttcgaatcc cgtactcggg ccggccggac ccgcggtctaa ggtgtttggat	12900
tggcctcccc ctcgtataaa gaccccgtt gcggattgac tccggacacg gggacgagcc	12960
cctttttat ttgctttccc cagatgcatc cggtgctgcg gcagatgcgc cccccgcccc	13020
agcagcagca acaacaccag caagagcggc agcaacagca gcgggagtca tgcaggggccc	13080
cctcaccac cctcggcggg ccggccacct cggcgtccgc ggccgtgtct ggcgcctgcg	13140
gcggcggcgg ggggcccggct gacgaccccc aggagcccc gcggcgcagg gccagacact	13200
acctggacct ggaggagggc gagggcctgg cgcggctggg ggcgccgtct cccgagcgcc	13260
acccgcgggt gcagctgaag cgcgactcgc gcgaggcgta cgtgcctcgg cagaacctgt	13320
tcagggaccg cgcgggagag gagcccagg agatgcggga caggaggttc agcgcagggc	13380
gggagctgcg gcaggggctg aaccgcgagc ggctgctgcg cgaggaggac tttgagcccg	13440
acgcgcggac ggggatcagc cccgcgcgcg cgcacgtggc ggccgccgac ctggtgacgg	13500
cgtacgagca gacggtgaac caggagatca acttccaaaa gagtttcaac aaccacgtgc	13560
gcacgctggg ggcgcgcgag gaggtgacca tcgggctgat gcacctgtgg gactttgtaa	13620
gcgcgctggg gcagaacccc aacagcaagc ctctgacggc gcagctgttc ctgatagtgc	13680
agcacagcag ggacaacgag gcgtttaggg acgcgctgct gaacatcacc gagcccagg	13740
gtcgggtggc gctggacctg attaacatcc tgcagagcat agtgggtgcag gagcgcagcc	13800
tgagcctggc cgacaagggt gcggccatca actactcgat gctgagcctg ggcaagtttt	13860
acgcgcgcaa gatctaccag acgccgtacg tgcccataga caaggagggt aagatcgacg	13920
gtttttacat gcgcatggcg ctgaagggtc tcaccctgag cgacgacctg ggcgtgtacc	13980
gcaacgagcg catccacaag gccgtgagcg tgagccggcg gcgcgagctg agcgaccgcg	14040
agctgatgca cagcctgcag cgggcgctgg cgggcgccgg cagcggcgac agggaggcgg	14100
agtcctactt cgatgcgggg gcggacctgc gctgggcgcc cagccggcgg gccctggagg	14160
ccgcgggggt ccgcgaggac tatgacgagg acggcgagga ggatgaggag tacgagctag	14220
aggagggcga gtacctggac taaaccgcgg gtgggtgtttc cggtagatgc aagacccgaa	14280
cgtgggtggc ccggcgctgc gggcggctct gcagagccag ccgtccggcc ttaactcctc	14340
agacgactgg cgacaggtca tggaccgcat catgtcgctg acggcgcgta acccgacgc	14400

gttccggcag	cagccgcagg	ccaacaggct	ctccgccatc	ctggaggcgg	tggtgcctgc	14460
gcgctcgaac	cccacgcacg	agaaggtgct	ggccatagtg	aacgcgctgg	ccgagaacag	14520
ggccatccgc	ccggacgagg	ccgggctggg	gtacgacgcg	ctgctgcagc	gcgtggcccc	14580
ctacaacagc	ggcaacgtgc	agaccaacct	ggaccggctg	gtggggggacg	tgcgcgaggc	14640
ggtggcgag	cgcgagcgcg	cggatcggca	gggcaacctg	ggctccatgg	tggcgctgaa	14700
tgccttcctg	agcacgcagc	cggccaacgt	gccgcggggg	caggaagact	acaccaactt	14760
tgtgagcgcg	ctgcgggtga	tggtgaccga	gacccccag	agcgaggtgt	accagtcggg	14820
cccggactac	ttcttccaga	ccagcagaca	gggcctgcag	acggtgaacc	tgagccaggc	14880
tttcaagaac	ctgcgggggc	tgtggggcgt	gaaggcgccc	accggcgacc	gggcgacggt	14940
gtccagcctg	ctgacgccc	actcgcgcct	gctgctgctg	ctgatcgcgc	cgttcacgga	15000
cagcggcagc	gtgtcccggg	acacctacct	ggggcacctg	ctgacctgt	accgcgaggc	15060
catcgggcag	gcgcaggtgg	acgagcacac	cttccaggag	atcaccagcg	tgagccgcgc	15120
gctggggcag	gaggacacga	gcagcctgga	ggcgactctg	aactacctgc	tgaccaaccg	15180
gcggcagaag	attccctcgc	tgcacagcct	gacctccgag	gaggagcgca	tcttgcgcta	15240
cgtgcagcag	agcgtgagcc	tgaacctgat	gcgcgacggg	gtgacgcca	gcgtggcgct	15300
ggacatgacc	gcgcgcaaca	tggaaccggg	catgtacgcc	gcgcaccggc	cttacatcaa	15360
ccgcctgatg	gactacctgc	atcgcgcggc	ggcctgtaac	cccgagtact	ttaccaacgc	15420
catcctgaac	ccgcaactgg	tcccgccgcc	cgggttctac	agcgggggct	tcgaggtccc	15480
ggagaccaac	gatggcttcc	tgtgggacga	catggacgac	agcgtgttct	ccccgcggcc	15540
gcaggcgctg	gcggaagcgt	ccctgctgcg	tccaagaag	gaggaggagg	aggaggcgag	15600
tcgccgccgc	ggcagcagcg	gcgtggcttc	tctgtccgag	ctgggggcgg	cagccgccgc	15660
gcgccccggg	tccctgggcg	gcagcccctt	tccgagcctg	gtgggggtctc	tgcacagcga	15720
gcgcaccacc	cgccctcggc	tgctgggcga	ggacgagtac	ctgaataact	ccctgctgca	15780
gccggtgcgg	gagaaaaacc	tgcctcccgc	cttccccaac	aacgggatag	agagcctggt	15840
ggacaagatg	agcagatgga	agacctatgc	gcaggagcac	agggacgcgc	ctgcgctccg	15900
gccgcccacg	cggcgccagc	gccacgaccg	gcagcggggg	ctggtgtggg	atgacgagga	15960
ctccgcggac	gatagcagcg	tgctggacct	gggagggagc	ggcaaccctg	tcgcgcacct	16020

gcgccccgc ctggggagga tgttttaaaa aaaaaaaaaa aangcaagaa gcatgatgca	16080
aaaattaaat aaaactcacc aaggccatgg cgaccgagcg ttggtttctt gtgttcctt	16140
cagtatgcgg cgcgcgggcga tgtaccagga gggacctcct ccctcttacg agagcgtggt	16200
gggcgcggcg gcggcgggcg cctcttctcc ctttgcgtcg cagctgctgg agccgccgta	16260
cgtgcctccg cgctacctgc ggcctacggg ggggagaaac agcatccgtt actcggagct	16320
ggcgccccctg ttcgacacca cccgggtgta cctgggtggac aacaagtcgg cggacgtggc	16380
ctccctgaac taccagaacg accacagcaa ttttttgacc acggtcatcc agaacaatga	16440
ctacagcccg agcgaggcca gcaccagac catcaatctg gatgaccggt cgcactgggg	16500
cggcgacctg aaaaccatcc tgcacaccaa catgcccac gtgaacgagt tcatgttcac	16560
caataagttc aaggcgcggg tgatggtgtc gcgctcgac accaaggaag accgggtgga	16620
gctgaagtac gagtgggtgg agttcgagct gccagagggc aactactccg agaccatgac	16680
cattgacctg atgaacaac cgatcgtgga gcactatctg aaagtgggca ggcagaacgg	16740
ggtcctggag agcgacatcg ggggtcaagtt cgacaccagg aacttccgcc tggggctgga	16800
ccccgtgacc gggctgggta tgcccgggggt gtacaccaac gaggccttcc atcccacat	16860
catcctgctg cccggctgcg ggggtggactt cacttacagc cgctgagca acctcctggg	16920
catccgcaag cggcagccct tccaggaggg cttcaggatc acctacgagg acctggaggg	16980
gggcaacatc cccgcgctcc tcgatgtgga ggcctaccag gatagcttga aggaaaatga	17040
ggcgggacag gaggataccg ccccgccgc ctccgccgc gccgagcagg gcgaggatgc	17100
tgctgacacc gcggccgcgg acggggcaga ggccgacccc gctatggtgg tggaggctcc	17160
cgagcaggag gaggacatga atgacagtgc ggtgcgcgga gacaccttcg tcacccgggg	17220
ggaggaaaag caagcggagg ccgaggccgc ggccgaggaa aagcaactgg cggcagcagc	17280
ggcggcgggcg gcgttggccg cggcggaggc tgagtctgag gggaccaagc ccgccaagga	17340
gcccgtgatt aagcccctga ccgaagatag caagaagcgc agttacaacc tgctcaagga	17400
cagcaccaac accgcgtacc gcagctggta cctggcctac aactacggcg acccgctgac	17460
gggggtgcgc tcctggacct tgctgtgcac gccggacgtg acctgctggc cggagcaggt	17520
gtactggtcg ctgcccga tgatgcaaga ccccgtagcc ttccgctcca cgcggcaggt	17580
cagcaacttc ccggtggtgg gcgccgagct gctgccgtg cactccaaga gcttctacaa	17640

cgaccaggcc	gtctactccc	agctcatccg	ccagttcacc	tctctgaccc	acgtgttcaa	17700
tcgctttcct	gagaaccaga	ttctggcgcg	cccgcccgcc	cccaccatca	ccaccgtcag	17760
tgaaaacgtt	cctgctctca	cagatcacgg	gacgctaccg	ctgcgcaaca	gcatcggagg	17820
agtccagcga	gtgaccgtta	ctgacgccag	acgccgcacc	tgcccctacg	tttacaaggc	17880
cttgggcata	gtctcgccgc	gcgtcctttc	cagccgcact	ttttgagcaa	caccaccatc	17940
atgtccatcc	tgatctcacc	cagcaataac	tccggctggg	gactgctgcg	cgcgcccagc	18000
aagatgttcg	gaggggag	gaagcgttcc	gagcagcacc	ccgtgcgcgt	gcgcgggcac	18060
ttccgcgccc	cctggggagc	gcacaaacgc	ggccgcgcgg	ggcgcaccac	cgtggacgac	18120
gccatcgact	cggtggtgga	gcaggcgcg	aactacaggc	ccgcggtctc	taccgtggac	18180
gcggccatcc	agaccgtggt	gcggggcgcg	cggcggtacg	ccaagctgaa	gagccgccgg	18240
aagcgcgtgg	cccgccgcca	ccgccgccga	cccggggccg	ccgccaaacg	cgccgccgcg	18300
gccctgcttc	gccgggcca	gcgcacgggc	cgccgcgccg	ccatgagggc	cgcgcgccgc	18360
ttggccgccg	gcatcaccgc	cgccaccatg	gcccccgta	cccgaagacg	cgcggccgcc	18420
gccgccgccg	ccgccatcag	tgacatggcc	agcaggcgcc	ggggcaacgt	gtactgggtg	18480
cgcgactcgg	tgaccggcac	gcgcgtgccc	gtgcgcttcc	gcccccgcg	gacttgagat	18540
gatgtgaaaa	aacaacactg	agtctcctgc	tgttggtgtg	atcccagcgg	cgcgggcgcg	18600
cgcagcgtca	tgtccaagcg	caaaatcaaa	gaagagatgc	tccaggctcgt	cgcgccggag	18660
atctatgggc	ccccgaagaa	ggaagagcag	gattcgaagc	cccgaagat	aaagcgggtc	18720
aaaaagaaaa	agaaagatga	tgacgatgcc	gatggggagg	tggagttcct	gcgcgccacg	18780
gcgcccaggc	gcccgggtgca	gtggaagggc	cggcgcgtaa	agcgcgtcct	gcgccccggc	18840
accgcggtgg	tcttcacgcc	cggcgagcgc	tccaccggga	ctttcaagcg	cgtctatgac	18900
gaggtgtacg	gcgacgaaga	cctgctggag	caggccaacg	agcgcttcgg	agagtttgct	18960
tacgggaagc	gtcagcgggc	gctggggaag	gaggacctgc	tggcgctgcc	gctggaccag	19020
ggcaacccca	ccccagttct	gaagcccgtg	accctgcagc	aggtgctgcc	gagcagcgca	19080
ccctccgagg	cgaagcgggg	tctgaagcgc	gagggcggcg	acctggcgcc	caccgtgcag	19140
ctcatggtgc	ccaagcggca	gaggctggag	gatgtgctgg	agaaaatgaa	agtagacccc	19200
ggtctgcagc	cggacatcag	ggtccgcccc	atcaagcagg	tggcgccggg	cctcggcgtg	19260

cagaccgtgg acgtgggtcat cccacccggc aactcccccg ccgccgccac cactaccgct	19320
gcctccacgg acatggagac acagaccgat cccgccgcag ccgcagccgc agccgccgcc	19380
gcgacctcct cggcgggaggt gcagacggac ccctgggtgc cgccggcgat gtcagctccc	19440
cgcgcgcgtc gcggggcgag gaagtacggc gccgccaacg cgctcctgcc cgagtacgcc	19500
ttgcatcctt ccatcgcgcc ccccccggc taccgaggct atacctaccg cccgcgaaga	19560
gccaagggtt ccacccgccg tccccgccga cgcgccgccg ccaccacccg ccgccgccgc	19620
cgcagacgcc agcccgact ggctccagtc tccgtgagga aagtggcgcg cgacggacac	19680
accctgggtgc tgcccagggc gcgctaccac cccagcatcg tttaaaagcc tgttgtggtt	19740
cttgagata tggccctcac ttgccgcctc cgtttcccgg tgccgggata ccgaggagga	19800
agatcgcgcc gcaggagggg tctggccggc cgcgccctga gcggaggcag ccgccgcgcg	19860
caccggcggc gacgcgccac cagccgacgc atgcgcggcg gggtgctgcc cctgttaatc	19920
cccctgatcg ccgcggcgat cggcgccgtg cccgggatcg cctccgtggc cttgcaagcg	19980
tcccagaggc attgacagac ttgcaaactt gcaaatatgg aaaaaaaaaac cccaataaaa	20040
aagtctagac tctcacgctc gcttgggtcct gtgactatct tgtagaatgg aagacatcaa	20100
ctttgcgtcg ctggccccgc gtcacggctc gcgcccgttc ctgggacact ggaacgatat	20160
cggcaccagc aacatgagcg gtggcgccctt cagttggggc tctctgtgga gcggcattaa	20220
aagtatcggg tctgccgtta aaaattacgg ctcccgggcc tggaacagca gcacgggcca	20280
gatgttgaga gacaagttga aagagcagaa cttccagcag aaggtggtgg agggcctggc	20340
ctccggcatc aacggggtgg tggacctggc caaccaggcc gtgcagaata agatcaacag	20400
cagactggac ccccgccgc cggtggagga ggtgccgccg gcgctggaga cggtgtcccc	20460
cgatgggcgt ggcgagaagc gcccgcggcc cgataggga gagaccactc tggtcacgca	20520
gaccgatgag ccgccccgt atgaggaggc cctgaagcaa ggtctgcca ccacgcggcc	20580
catcgcgcc atggccaccg gggtggtggg ccgccacacc cccgccacgc tggacttgcc	20640
tccgccgcc gatgtgccgc agcagcagaa ggcggcacag ccgggcccgc ccgcgaccgc	20700
ctcccgttcc tccgccggtc ctctgcgccg cgcgccagc ggccccgcg ggggggtcgc	20760
gaggcacggc aactggcaga gcacgtgaa cagcatcgtg ggtctggggg tgcggtccgt	20820
gaagcgccgc cgatgctact gaatagctta gctaactgtg tgtatgtgtg tatgcgcctt	20880

atgtcgccgc	cagaggagct	gctgagtcgc	cgccgttcgc	gcgcccacca	ccaccgccac	20940
tccgcccctc	aagatggcga	ccccatcgat	gatgccgcag	tggtcgtaca	tgcacatctc	21000
gggccaggac	gcctcggagt	acctgagccc	cgggctgggtg	cagttcgccc	gcgccaccga	21060
gagctacttc	agcctgagta	acaagtttag	gaacccccacg	gtggcgccca	cgcacgatgt	21120
gaccaccgac	cggctctcagc	gcctgacgct	gcggttcatt	cccgtggacc	gcgaggacac	21180
cgcgtactcg	tacaaggcgc	ggttcaccct	ggccgtgggc	gacaaccgcg	tgctggacat	21240
ggcctccacc	tactttgaca	tccgcgggggt	gctggaccgg	ggtcccactt	tcaagcccta	21300
ctctggcacc	gcctacaact	ccctggcccc	caagggcgct	cccaactcct	gcgagtggga	21360
gcaagaggaa	actcaggcag	ttgaagaagc	agcagaagag	gaagaagaag	atgctgacgg	21420
tcaagctgag	gaagagcaag	cagctaccaa	aaagactcat	gtatatgctc	aggctcccct	21480
ttctggcgaa	aaaattagta	aagatgggtct	gcaaatagga	acggacgcta	cagctacaga	21540
acaaaaacct	atttatgcag	accctacatt	ccagcccgaa	ccccaaatcg	gggagtccca	21600
gtggaatgag	gcagatgcta	cagtcgccgg	cggtagagtg	ctaaagaaat	ctactcccat	21660
gaaaccatgc	tatggttcct	atgcaagacc	cacaaatgct	aatggaggtc	agggtgtact	21720
aacggcaaat	gcccagggac	agctagaatc	tcaggttgaa	atgcaattct	tttcaacttc	21780
tgaaaacgcc	cgtaacgagg	ctaacaacat	tcagcccaaa	ttggtgctgt	atagtgagga	21840
tgtgcacatg	gagaccccg	atacgcacct	ttcttacaag	cccgcaaaaa	gcgatgacaa	21900
ttcaaaaatc	atgctgggtc	agcagtccat	gccaacaga	cctaattaca	tcggcttcag	21960
agacaacttt	atcggcctca	tgtattacaa	tagcactggc	aacatgggag	tgcttgacgg	22020
tcaggcctct	cagttgaatg	cagtgggtgga	cttgcaagac	agaaacacag	aactgtccta	22080
ccagctcttg	cttgattcca	tgggtgacag	aaccagatac	ttttccatgt	ggaatcaggc	22140
agtggacagt	tatgaccag	atgttagaat	tattgaaaat	catggaactg	aagacgagct	22200
ccccaaactat	tgtttcctc	tgggtggcat	aggggtaact	gacacttacc	aggctgttaa	22260
aaccaacaat	ggcaataacg	ggggccagggt	gacttggaca	aaagatgaaa	cttttgcaga	22320
tcgcaatgaa	ataggggtgg	gaaacaattt	cgctatggag	atcaacctca	gtgccaacct	22380
gtggagaaac	ttcctgtact	ccaacgtggc	gctgtaccta	ccagacaagc	ttaagtacaa	22440
cccctccaat	gtggacatct	ctgacaacct	caacacctac	gattacatga	acaagcgagt	22500

ggtggccccg	gggctggtgg	actgctacat	caacctgggc	gcgcgctggt	cgctggacta	22560
catggacaac	gtcaaccctt	tcaaccacca	ccgcaatgcg	ggcctgcgct	accgctccat	22620
gctcctgggc	aacggggcgct	acgtgccctt	ccacatccag	gtgccccaga	agttctttgc	22680
catcaagaac	ctcctcctcc	tgccgggctc	ctacacctac	gagtgggaact	tcaggaagga	22740
tgtcaacatg	gtcctccaga	gctctctggg	taacgatctc	agggtggacg	gggccagcat	22800
caagttcgag	agcatctgcc	tctacgccac	cttcttcccc	atggcccaca	acacggcctc	22860
cacgctcgag	gccatgctca	ggaacgacac	caacgaccag	tccttcaatg	actacctctc	22920
cgccgccaac	atgctctacc	ccataccgcg	caacgccacc	aacgtcccca	tctccatccc	22980
ctcgcgcaac	tggggggcct	tccgcggctg	ggccttcacc	cgcctcaaga	ccaaggagac	23040
cccctccctg	ggctcgggat	tcgacccta	ctacacctac	tcgggctcca	ttccctacct	23100
ggacggcacc	ttctacctca	accacacttt	caagaaggctc	tcgggtcacct	tcgactcctc	23160
ggtcagctgg	ccgggcaacg	accgtctgct	cacccccaac	gagttcgaga	tcaagcgctc	23220
ggtcgacggg	gagggctaca	acgtggcca	gtgcaacatg	accaaggact	ggttcctggt	23280
ccagatgctg	gccaaactaca	acatcggtta	ccagggttct	tacatcccag	agagctacaa	23340
ggacaggatg	tactccttct	tcaggaactt	ccagcccatg	agccggcagg	tggtggacca	23400
gaccaagtac	aaggactacc	aggaggtggg	catcatccac	cagcacaaca	actcgggctt	23460
cgtgggctac	ctcgccccca	ccatgcgcga	gggacaggcc	taccccgcca	acttccccta	23520
tccgtcata	ggcaagaccg	cggtcgacag	catcacccag	aaaaagtcc	tctgcgaccg	23580
cacctctg	cgcatccctt	tctccagcaa	cttcatgtcc	atgggtgcgc	tctcggacct	23640
gggccagaac	ttgctctacg	ccaactccgc	ccacgccctc	gacatgacct	tcgaggtcga	23700
ccccatggac	gagcccaccc	ttctctatgt	tctgttcgaa	gtctttgacg	tggtccgggt	23760
ccaccagccg	caccgcggcg	tcacgagac	cgtgtacctg	cgtacgccct	tctcggccgg	23820
caacgccacc	acctaaagaa	gcaagccgca	gtcatcgccg	cctgcatgcc	gtcgggttcc	23880
accgagcaag	agctcagggc	catcgtcaga	gacctgggat	gcggggcccta	ttttttgggc	23940
accttcgaca	agcgcttccc	tggctttgtc	tccccacaca	agctggcctg	cgccatcgctc	24000
aacacggccg	gccgcgagac	cgggggcgtg	cactggctgg	ccttcgcctg	gaacccgcgc	24060
tccaaaacat	gcttcctctt	tgacccttc	ggcttttcgg	accagcggct	caagcaaadc	24120

tacgagttcg agtacgaggg cttgctgcgt cgcagcgcca tcgcctcctc gcccgaccgc	24180
tgcgtcaccc tcgaaaagtc caccagacc gtgcaggggc ccgactcggc cgcctgcggt	24240
ctcttctgct gcatgtttct gcacgccttt gtgcactggc ctgagagtcc catggaccgc	24300
aacccacca tgaacttgct gacgggggtg cccaactcca tgctccagag ccccaggtc	24360
gagccacccc tgcgccgcaa ccaggagcag ctctacagct tcctggagcg ccactgcct	24420
tacttccgcc gccacagcgc acagatcagg agggccacct ctttctgcca cttgcaagag	24480
atgcaagaag ggtaataacg atgtacacac tttttttctc aataaatggc atctttttat	24540
ttatacaagc tctctgggggt attcatttcc caccaccacc cgccgttgct gccatctggc	24600
tctatttaga aatcgaaagg gttctgccgg gagtgcctgt gcgccacggg cagggacacg	24660
ttgcgatact ggtagcgggt gcccacttg aactcgggca ccaccaggcg aggagctcg	24720
gggaagtttt cgctccacag gctgcgggtc agcaccagcg cgttcatcag gtcgggcgcc	24780
gagatcttga agtcgcagtt ggggccgccg ccctgcgcgc gcgagttgcg gtacaccggg	24840
ttgcagcact ggaacaccaa cagcgccggg tgcttcacgc tggccagcac gctgcggtcg	24900
gagatcagct cggcgtccag gtcctccgcg ttgctcagcg cgaacgggggt catcttgggc	24960
acttgccgcc ccaggaaggc cgctgcccc ggtttcgagt tgcaagtcga gcgcagcggg	25020
atcagcaggt gcccgtgccc ggactcggcg ttgggggtaca gcgcgcgcac gaaggcctgc	25080
atctggcggg aggccatctg ggccttggcg ccctccgaga agaacatgcc gcaggacttg	25140
cccgagaact ggtttgcggg gcagctggcg tcgtgcaggc agcagcgcg gcggtgttg	25200
gcgatctgca ccacgttgcg cccccaccgg ttcttcacga tcttggcctt ggacgattgc	25260
tccttcagcg cgcgctgccc gttctcgtg gtcacatcca tctcgatcac atgttccttg	25320
ttcaccatgc tgctgccgtg cagacacttc agctcgccct ccgtctcggt gcagcggtgc	25380
tgccacagcg cgcagcccgt gggctcgaag gacttgtagg tcacctccgc gaaggactgc	25440
aggtacccct gcaaaaagcg gcccatcatg gtcacgaagg tcttggtgct gctgaaggtc	25500
agctgcagcc cgcggtgctc ctggttcagc caggtcttgc acacggccgc cagcgccctc	25560
acctggtcgg gcagcatctt gaagttcacc ttcagctcat tctccacgtg gtacttgtcc	25620
atcagcgtgc gcgccgctc catgcccttc tcccaggccg acaccagcgg caggctcacg	25680
gggttcttca ccatcaccgt ggccgccgcc tccgccgcgc tttcgctttc cggccgctg	25740

ttctcttcct cttcctcctc ttcctcgccg ccgcccactc gcagcccccg caccacgggg	25800
tcgtcttcct gcaggcgctg caccttgcg c ttgccgttg c gccctgctt gatgcgcacg	25860
ggcgggttg c tgaagccac catcaccagc gcggcctctt cttgctcgtc ctcgctgtcc	25920
agaatgacct ccggggaggg ggggttggtc atcctcagta ccgaggcacg cttctttttc	25980
ttcctggggg cgttcgccag ctccgcggct gcggccgctg ccgaggtcga aggccgaggg	26040
ctgggcgtgc gcggcaccag cgcgtcctgc gagccgtcct cgtcctcctc ggactcgaga	26100
cggaggcggg cccgcttctt cggggggcgcg cggggcggcg gaggcggcgg cggcgacgga	26160
gacggggacg agacatcgtc cagggtgggt ggacggcggg ccgcgccgcg tccgcgctcg	26220
ggggtggtct cgcgctggtc ctcttcccga ctggccatct cccactgctc cttctcctat	26280
aggcagaaag agatcatgga gtctctcatg cgagtcgaga aggaggagga cagcctaacc	26340
gccccctctg agccctccac caccgccgc accaccgcca atgccgccgc ggacgacgcg	26400
cccaccgaga ccaccgccag taccaccctc cccagcgacg ccccccgct cgagaatgaa	26460
gtgctgatcg agcaggacc gggttttgtg agcggagagg aggatgaggt ggatgagaag	26520
gagaaggagg aggtcgccgc ctcagtgcc aaagaggata aaaagcaaga ccaggacgac	26580
gcagataagg atgagacagc agtcgggcgg gggaacggaa gccatgatgc tgatgacggc	26640
tacctagacg tgggagacga cgtgctgctt aagcacctgc accgccagtg cgtcatcgtc	26700
tgcgacgcgc tgcaggagcg ctgcgaagtg cccctggacg tggcggaggt cagccgcgcc	26760
tacgagcggc acctcttcgc gccgcacgtg cccccaagc gccgggagaa cggcacctgc	26820
gagcccaacc cgcgtctcaa cttctacccg gtcttcgcgg taccgaggt gctggccacc	26880
taccacatct ttttcaaaa ctgcaagatc cccctctcct gccgcgcaa ccgcacccgc	26940
gccgacaaaa ccctgaccct gcggcagggc gccacatac ctgatatcgc ctctctggag	27000
gaagtgccca agatcttcga gggctctcgg cgcgacgaga aacgggcggc gaacgctctg	27060
cacggagaca gcgaaaacga gagtcactcg ggggtgctgg tggagctcga gggcgacaac	27120
gcgcgcctgg ccgtactcaa gcgcagcata gaggtcacc actttgccta cccggcgctc	27180
aacctgcccc ccaaggatcat gagtgtggtc atgggcgagc tcatcatgcg ccgcgccag	27240
cccctggccg cggatgcaaa cttgcaagag tcctccgagg aaggcctgcc cgcggtcagc	27300
gacgagcagc tggcgcgctg gctggagacc cgcgaccccg cgcagctgga ggagcggcgc	27360

aagctcatga tggccgcggt gctggtcacc gtggagctcg agtgtctgca gcgcttcttc	27420
gcggaccccg agatgcagcg caagctcgag gagaccctgc actacacctt ccgccagggc	27480
tacgtgcgcc aggcctgcaa gatctccaac gtggagctct gcaacctggt ctctacctg	27540
ggcatcctgc acgagaaccg cctcgggcag aacgtcctgc actccaccct caaaggggag	27600
gcgcgccgcg actacatccg cgactgcgcc tacctcttcc tctgctacac ctggcagacg	27660
gccatggggg tctggcagca gtgcctggag gagcgcaacc tcaaggagct ggaaaagctc	27720
ctcaagcgca ccctcagga cctctggacg ggcttcaacg agcgctcggt ggccgccgcg	27780
ctggcggaca tcatctttcc cgagcgcctg ctcaagacc tgacagcagg cctgcccgc	27840
ttcaccagcc agagcatgct gcagaacttc aggactttca tcctggagcg ctcgggcatc	27900
ctgccggcca cttgctgcgc gctgcccagc gacttcgtgc ccatcaagta cagggagtgc	27960
ccgccgccgc tctggggcca ctgctacctc ttccagctgg ccaactacct cgcctaccac	28020
tcggacctca tggaagacgt gagcggcgag ggcctgctcg agtgccactg ccgctgcaac	28080
ctctgcacgc cccaccgctc tctagtctgc aaccgcagc tgctcagcga gagtcagatt	28140
atcggtacct tcgagctgca ggggtccctcg cctgacgaga agtccgcggc tccagggctg	28200
aaactcactc cggggctgtg gacttccgcc tacctacgca aatttgtacc tgaggactac	28260
cacgcccacg agatcaggtt ctacgaagac caatcccgcc cgcccaaggc ggagctcacc	28320
gcctgcgtca tcaccagggt gcacatcctg ggccaattgc aagccatcaa caaagcccgc	28380
cgagagtctt tgctgaaaaa gggtcggggg gtgtacctgg acccccagtc cggcgaggag	28440
ctaaacccgc tacccccgcc gccgcccag cagcgggacc ttgcttcca ggatggcacc	28500
cagaaagaag cagcagccgc cgccgccgcc gcagccatac atgcttctgg aggaagagga	28560
ggaggactgg gacagtcagg cagaggaggt ttcggacgag gagcaggagg agatgatgga	28620
agactgggag gaggacagca gcctagacga ggaagcttca gaggccgaag aggtggcaga	28680
cgcaacacca tcgccctcgg tcgcagcccc ctgccgggg cccctgaaat cctccgaacc	28740
cagcaccagc gctataacct ccgctcctcc ggcgccggcg ccaccgccc gcagacccaa	28800
ccgtagatgg gacaccacag gaaccggggg cggttaagtcc aagtgccgc cgccgccacc	28860
gcagcagcag cagcagcagc gccagggcta ccgctcgtgg cgcgggcaca agaacgcat	28920
agtcgcctgc ttgcaagact gcgggggcaa catctctttc gcccgccgct tcctgctatt	28980

ccaccacggg gtcgcctttc cccgcaatgt cctgcattac taccgtcatc tctacagccc	29040
ctactgcagc ggcgaccagc agggggcagc ggcagccaca gggcgacca ccacctagga	29100
agatatcctc cgcgggcaag acagcggcag cagcggccag gagacccgcg gcagcagcgg	29160
cgggagcggg gggcgactg cgcctctcgc ccaacgaacc cctctcgacc cgggagctca	29220
gacacaggat cttccccact ttgtatgcca tcttccaaca gagcagaggc caggagcagg	29280
agctgaaaat aaaaaacaga tctctgcgct ccctcacccg cagctgtctg tatcacaaaa	29340
gcgaagatca gcttcggcgc acgctggagg acgcggaggc actcttcagc aaatactgcg	29400
cgctcactct taaagactag ctccgcgccc ttctcgaatt taggcgggag aaaactacgt	29460
catcgccggc cgccgcccag cccgcccagc cgagatgagc aaagagattc ccacgccata	29520
catgtggagc taccagccgc agatgggact cgcggcggga gcggcccagg actactccac	29580
ccgcatgaac tacatgagcg cgggacccca catgatctca caggtcaacg ggatccgcgc	29640
ccagcgaaac caaatactgc tggaacaggc ggccatcacc gccacgcccc gccataatct	29700
caacccccga aattggcccc cgcacctcgt gtaccaggaa accccctccg ccaccaccgt	29760
actacttccg cgtgacgccc aggccgaagt ccagatgact aactcagggg cgcagctcgc	29820
ggcgggcttt cgtcacgggg cgcggccgct ccgaccaggc ataagacacc tgatgatcag	29880
aggccgaggc atccagctca acgacgagtc ggtgagctct tcgctcggtc tccgtccgga	29940
cggaaactttc cagctcgccg gatccggccg ctcttcgttc acgccccgcc aggcgtacct	30000
gactctgcag acctcgtcct cggagccccg ctccggcggc atcggaacct tccagttcgt	30060
ggaggagttc gtgccctcgg tctacttcaa ccccttctcg ggacctccg gacgtatccc	30120
cgaccagttc attccgaact ttgacgcggc gaaggactcg gcggacggct acgactgaat	30180
gtcaggtgtc gaggcagagc agcttcgcct gagacacctc gagcactgcc gccgccacaa	30240
gtgcttcgcc cgcggttctg gtgagttctg ctactttcag ctacccgagg agcataccga	30300
ggggccggcg cacggcgtcc gcctgaccac ccagggcgag gttacctgtt ccctcatccg	30360
ggagtttacc ctccgtcccc tgctagtggg gcgggagcgg ggtccctgtg tcctaactat	30420
cgcctgcaac tgccctaacc ctggattaca tcaagatctt tgctgtcatc tctgtgtga	30480
gtttaataaa cgctgagatc agaatctact gggatttagt cccctttaac taatcaaaca	30540
ctggaatcaa taaaaagaat cacttactta aaatcagaca gcaggtctct gtccagttta	30600

ttcagcagca cctccttccc ctctcccaa ctctggtact ccaaacgcct tctggcggca	30660
aacttcctcc acaccctgaa gggaatgtca gattcttgct cctgtccctc cgcaccact	30720
atcttcatgt tgttgcatg gaagcgcacc aaaacgtctg acgagagctt caaccccgtg	30780
taccctatg acacggaaag cggccctccc tccgtccctt tcctcacccc tcccttcgtg	30840
tctcccgatg gattccaaga aagtcccccc ggggtcctgt ctctgaacct ggccgagccc	30900
ctggtcactt cccacggcat gctcgccctg aaaatgggaa gtggcctctc cctggacgac	30960
gctggcaacc tcacctctca agatatcacc accgctagcc ctcccctcaa aaaaaccaag	31020
accaacctca gcctagaaac ctcatcccc ctaactgtga gcacctcagg cgccctcacc	31080
gtagcagccg ccgctcccct ggcggtggcc ggcacctccc tcaccatgca atcagaggcc	31140
cccctgacag tacaggatgc aaaactcacc ctggccacca aaggccccct gaccgtgtct	31200
gaaggcaaac tggccttgca aacatcggcc ccgctgacgg ccgctgacag cagcacctc	31260
acagtcatg ccacaccacc ccttagcaca agcaatggca gcttgggtat tgacatgcaa	31320
gccccattt acaccacaa tggaaaacta ggacttaact ttggcgctcc cctgcatgtg	31380
gtagacagcc taaatgcact gactgtagtt actggccaag gtcttacgat aaacggaaca	31440
gccctacaaa ctagagtctc aggtgccctc aactatgaca catcaggaaa cctagaattg	31500
agagctgcag ggggtatgcg agttgatgca aatggccaac ttatccttga ttagcttac	31560
ccatttgatg cacaaaacaa tctcagcctt aggcttggac agggaccctt gtttgttaac	31620
tctgcccaca acttgcatgt taactacaac agaggcctct acctgttcac atctggaaat	31680
acaaaaagc tagaagttaa tatcaaaaca gccaaagggtc tcatttatga tgacactgct	31740
atagcaatca atgcgggtga tgggctacag tttgactcag gctcagatac aaatccatta	31800
aaaactaaac ttggattagg actggattat gactccagca gagccataat tgctaaactg	31860
ggaactggcc taagctttga caacacaggt gccatcacag taggcaacaa aaatgatgac	31920
aagcttacct tgtggaccac accagacca tcccctaact gtagaatcta ttcagagaaa	31980
gatgctaaat tcacacttgt tttgactaaa tgcggcagtc aggtgttggc cagcgtttct	32040
gttttatctg taaaaggtag cttgcgccc atcagtggca cagtaactag tgctcagatt	32100
gtcctcagat ttgatgaaaa tggagttcta ctaagcaatt cttcccttga ccctcaatac	32160
tggaaactaca gaaaaggtga cttacagag ggcactgcat ataccaacgc agtgggattt	32220

atgccaacc	tcacagcata	cccaaaaaca	cagagccaaa	ctgctaaaag	caacattgta	32280
agtcaggttt	acttgaatgg	ggacaaatcc	aaacccatga	ccctcaccat	taccctcaat	32340
ggaactaatg	aaacaggaga	tgccacagta	agcacttact	ccatgtcatt	ctcatggaac	32400
tggaatggaa	gtaattacat	taatgaaacg	ttccaaacca	actccttcac	cttctcctac	32460
atcgccaag	aataaaaagc	atgacgctgt	tgatttgatt	caatgtgttt	ctgtttttatt	32520
ttcaagcaca	acaaaatcat	tcaagtcatt	cttccatctt	agcttaatag	acacagtagc	32580
ttaatagacc	cagtagtgca	aagccccatt	ctagcttata	actagtggag	aagtactcgc	32640
ctacatgggg	gtagagtcac	aatcgtgcat	caggataggg	cggtgggtgct	gcagcagcgc	32700
gcgaataaac	tgctgccgcc	gccgctccgt	cctgcaggaa	tacaacatgg	cagtgggtctc	32760
ctcagcgatg	attcgcaccg	cccgcagcat	aaggcgcctt	gtcctccggg	cacagcagcg	32820
caccctgatc	tcacttaaat	cagcacagta	actgcagcac	agcaccacaa	tattgttcaa	32880
aatcccacag	tgcaaggcgc	tgtatccaaa	gctcatggcg	gggaccacag	aaccacgtg	32940
gccatcatac	cacaagcgca	ggtagattaa	gtggcgaccc	ctcataaaca	cgctggacat	33000
aaacattacc	tcttttggca	tgttgtaatt	caccacctcc	cggtaccata	taaacctctg	33060
attaaacatg	gcgccatcca	ccaccatcct	aaaccagctg	gccaaaacct	gcccgcgggc	33120
tatacactgc	aggggaaccgg	gactggaaca	atgacagtgg	agagcccagg	actcgtaacc	33180
atggatcatc	atgctcgtca	tgatatcaat	gttggcacia	cacaggcaca	cgtgcataca	33240
cttcctcagg	attacaagct	cctcccgcgt	tagaaccata	tcccaggga	caaccattc	33300
ctgaatcagc	gtaaatccca	cactgcaggg	aagacctcgc	acgtaactca	cgttgtgcat	33360
tgtcaaagtg	ttacattcgg	gcagcagcgg	atgatcctcc	agtatggtag	cgcggttttc	33420
tgtctcaaaa	ggaggtagac	gatccctact	gtacggagtg	cgccgagaca	accgagatcg	33480
tgttggtcgt	agtgtcatgc	caaattggaac	gccggacgta	gtcatatttc	ctgaagtctt	33540
agatctctca	acgcagcacc	agcaccaaca	cttcgcagtg	taaaaggcca	agtgccgaga	33600
gagtatatat	aggaataaaa	agtgacgtaa	acgggcaaag	tcaaaaaaac	gcccagaaaa	33660
accgcacgcg	aacctacgcc	ccgaaacgaa	agccaaaaaa	cactagacac	ttccttccgg	33720
cgtcaacttc	cgctttccca	cgctacgtca	cttgccccag	tcaaacaac	tacatatccc	33780
gaacttccaa	gtcgccacgc	ccaaaacacc	gcctacacct	ccccgccgcg	cggcccgccc	33840

ccaaacccgc	ctcccccccc	gcgccccgcc	ccgcgccgcc	catctcatta	tcatattggc	33900
ttcaatccaa	aataaggtat	attattgatg	atggtttaaa	cggatcctct	agagtcgacc	33960
tgcaggcatg	caagcttgag	tattctatag	tgtcacctaa	atagcttggc	gtaatcatgg	34020
tcatagctgt	ttcctgtgtg	aaattgttat	ccgctcacia	ttccacacia	catacgagcc	34080
ggaagcataa	agtgtaaagc	ctgggggtgcc	taatgagtga	gctaactcac	attaattgcg	34140
ttgcgctcac	tgcccgtttt	ccagtcggga	aacctgtcgt	gccagctgca	ttaatgaatc	34200
ggccaacgcg	aaccccttgc	ggccgcccgg	gccgtcgacc	aattctcatg	tttgacagct	34260
tatcatcgaa	tttctgcat	tcatccgctt	attatcactt	attcaggcgt	agcaaccagg	34320
cgtttaaggg	caccaataac	tgccttaaaa	aaattacgcc	ccgccctgcc	actcatcgca	34380
gtactgttgt	aattcattaa	gcattctgcc	gacatggaag	ccatcacaaa	cggcatgatg	34440
aacctgaatc	gccagcggca	tcagcacctt	gtcgccttgc	gtataatatt	tgcccatggt	34500
gaaaacgggg	gcgaagaagt	tgtccatatt	ggccacgttt	aaatcaaaac	tggtgaaact	34560
caccagggga	ttggctgaga	cgaaaaacat	attctcaata	aaccctttag	ggaaataggc	34620
caggttttca	ccgtaacacg	ccacatcttg	cgaatatatg	tgtagaaact	gccggaaatc	34680
gtcgtgggtat	tcactccaga	gcgatgaaaa	cgtttcagtt	tgctcatgga	aaacggtgta	34740
acaagggtga	acactatccc	atatcaccag	ctcaccgtct	ttcattgcca	tacggaattc	34800
cggatgagca	ttcatcaggc	gggcaagaat	gtgaataaag	gccggataaa	acttgtgctt	34860
atTTTTcttt	acggctctta	aaaaggccgt	aatatccagc	tgaacggctct	ggttataggt	34920
acattgagca	actgactgaa	atgcctcaaa	atgttcttta	cgatgccatt	gggatatatc	34980
aacggtggta	tatccagtga	TTTTTTctc	catttttagct	tccttagctc	ctgaaaatct	35040
cgataactca	aaaaatacgc	ccggtagtga	tcttattttca	ttatggtgaa	agttggaacc	35100
tcttacgtgc	cgatcaacgt	ctcattttcg	ccaaaagttg	gcccagggct	tcccgggtatc	35160
aacagggaca	ccaggattta	tttattctgc	gaagtgatct	tccgtcacag	gtattttattc	35220
gcgataagct	catggagcgg	cgtaaccgtc	gcacaggaag	gacagagaaa	gcgcgggatct	35280
gggaagtgac	ggacagaacg	gtcaggacct	ggattggggga	ggcggttgcc	gccgctgctg	35340
ctgacgggtgt	gacgttctct	gttccgggtca	caccacatac	gttccgcat	tcctatgcga	35400
tgcacatgct	gtatgccggt	ataccgctga	aagttctgca	aagcctgatg	ggacataagt	35460

ccatcagttc aacggaagtc tacacgaagg tttttgcgct ggatgtggct gcccggcacc	35520
gggtgcagtt tgcgatgccg gagtctgatg cggttgcatg gctgaaacaa ttatcctgag	35580
aataaatgcc ttggccttta tatggaaatg tggaactgag tggatatgct gtttttgtct	35640
gttaaacaga gaagctggct gttatccact gagaagcgaa cgaaacagtc gggaaaatct	35700
cccattatcg tagagatccg cattattaat ctcaggagcc tgtgtagcgt ttataggaag	35760
tagtgttctg tcatgatgcc tgcaagcggg aacgaaaacg atttgaatat gccttcagga	35820
acaatagaaa tcttcgtgcg gtgttacgtt gaagtggagc ggattatgtc agcaatggac	35880
agaacaacct aatgaacaca gaacatgat gtggtctgtc cttttacagc cagtagtgct	35940
cgccgcagtc gagcgacagg gcgaagccct cgagtgagcg aggaagcacc agggaacagc	36000
acttatatat tctgcttaca cacgatgcct gaaaaaactt cccttggggg tatccactta	36060
tccacgggga tatttttata attatTTTTT ttatagTTTT tagatcttct tttttagagc	36120
gcctttagg cctttatcca tgctggttct agagaagggtg ttgtgacaaa ttgccctttc	36180
agtgtgacaa atcacctca aatgacagtc ctgtctgtga caaattgccc ttaacctgt	36240
gacaaattgc ctcagaaga agctgttttt tcacaaagtt atccctgctt attgactctt	36300
ttttatttag tgtgacaatc taaaaacttg tcacacttca catggatctg tcatggcgga	36360
aacagcgggt atcaatcaca agaaacgtaa aaatagcccg cgaatcgtcc agtcaaacga	36420
cctcactgag gcggcatata gtctctcccg ggatcaaaaa cgtatgctgt atctgttcgt	36480
tgaccagatc agaaaatctg atggcaccct acaggaacat gacggtatct gcgagatcca	36540
tgttgctaaa tatgctgaaa tattcggatt gacctctgcg gaagccagta aggatatacg	36600
gcaggcattg aagagtttcg cggggaagga agtggttttt tatcgccctg aagaggatgc	36660
cggcgatgaa aaaggctatg aatcttttcc ttggtttatc aaacgtgcgc acagtccatc	36720
cagagggtt tacagtgtac atatcaacc atatctcatt cccttcttta tcgggttaca	36780
gaaccggtt acgcagtttc ggcttagtga aacaaaagaa atcaccaatc cgtatgccat	36840
gcgtttatac gaatccctgt gtcagtatcg taagccggat ggctcaggca tcgtctctct	36900
gaaaatcgac tggatcatag agcgttacca gctgcctcaa agttaccagc gtatgcctga	36960
ctccgccgc cgcttctgc aggtctgtgt taatgagatc aacagcagaa ctccaatgcg	37020
cctctcatatc attgagaaaa agaaaggccg ccagacgact catatcgtat tttccttccg	37080

cgatatcact tccatgacga caggatagtc tgagggttat ctgtcacaga tttgagggtg	37140
gttcgtcaca tttgttctga cctactgagg gtaatttgtc acagttttgc tgtttccttc	37200
agcctgcatg gattttctca tactttttga actgtaattt ttaaggaagc caaatttgag	37260
ggcagtttgt cacagttgat ttccttctct ttcccttcgt catgtgacct gatatcgggg	37320
gttagtctgt catcattgat gagggttgat tatcacagtt tattactctg aattggctat	37380
ccgcgtgtgt acctctacct ggagtttttc ccacgggtga tatttcttct tgcgctgagc	37440
gtaagagcta tctgacagaa cagttcttct ttgcttcctc gccagttcgc tcgctatgct	37500
cggttacacg gctgcggcga gcgctagtga taataagtga ctgaggtatg tgctcttctt	37560
atctcctttt gtagtgttgc tcttatttta aacaactttg cggttttttg atgactttgc	37620
gattttgttg ttgctttgca gtaaattgca agatttaata aaaaaacgca aagcaatgat	37680
taaaggatgt tcagaatgaa actcatggaa acacttaacc agtgcataaa cgctgggtcat	37740
gaaatgacga aggctatcgc cattgcacag tttaatgatg acagcccga agcgaggaaa	37800
ataacccggc gctggagaat aggtgaagca gcggatttag ttggggtttc ttctcaggct	37860
atcagagatg ccgagaaagc agggcgacta ccgcacccgg atatggaaat tcgaggacgg	37920
gttgagcaac gtgttggtta tacaattgaa caaattaatc atatgcgtga tgtgttttgt	37980
acgcgattgc gacgtgctga agacgtattt ccaccggtga tcgggggttg tgcccataaa	38040
ggtggcgttt acaaaacctc agtttctgtt catcttgctc aggatctggc tctgaagggg	38100
ctacgtgttt tgctcgtgga aggtaacgac cccagggaa cagcctcaat gtatcacgga	38160
tgggtaccag atcttcatat tcatgcagaa gacactctcc tgcctttcta tcttggggaa	38220
aaggacgatg tcacttatgc aataaagccc acttgctggc cggggcttga cattattcct	38280
tcctgtctgg ctctgcaccg tattgaaact gagttaatgg gcaaatttga tgaaggtaaa	38340
ctgcccaccg atccacacct gatgctccga ctggccattg aaactgttgc tcatgactat	38400
gatgtcatag ttattgacag cgcgctaac ctgggtatcg gcacgattaa tgctgtatgt	38460
gctgctgatg tgctgattgt tcccacgcct gctgagttgt ttgactacac ctccgcactg	38520
cagtttttcg atatgcttcg tgatctgctc aagaacgttg atcttaaagg gttcgagcct	38580
gatgtacgta ttttgcttac caaatacagc aatagtaatg gctctcagtc cccgtggatg	38640
gaggagcaaa ttcgggatgc ctggggaagc atggttctaa aaaatgttgt acgtgaaacg	38700

gatgaagttg gtaaaggtca gatccggatg agaactgttt ttgaacaggc cattgatcaa	38760
cgctcttcaa ctgggtgcctg gagaaatgct ctttctattt gggaacctgt ctgcaatgaa	38820
attttcgatc gtctgattaa accacgctgg gagattagat aatgaagcgt gcgcctgtta	38880
ttccaaaaca tacgctcaat actcaaccgg ttgaagatac ttcgttatcg acaccagctg	38940
ccccgatggg ggattcgtta attgcgcgcg taggagtaat ggctcgcggg aatgccatta	39000
ctttgcctgt atgtggtcgg gatgtgaagt ttactcttga agtgctccgg ggtgatagtg	39060
ttgagaagac ctctcgggta tggtcaggta atgaacgtga ccaggagctg cttactgagg	39120
acgcactgga tgatctcatc ctttcttttc tactgactgg tcaacagaca ccggcgttcg	39180
gtcgaagagt atctgggtgtc atagaaattg ccgatgggag tcgccgtcgt aaagctgctg	39240
cacttaccga aagtgattat cgtgttctgg ttggcgagct ggatgatgag cagatggctg	39300
cattatccag attgggtaac gattatcgcc caacaagtgc ttatgaacgt ggtcagcggt	39360
atgcaagccg attgcagaat gaatttgctg gaaatatttc tgcgctggct gatgcggaaa	39420
atatttcacg taagattatt acccgctgta tcaacaccgc caaattgcct aaatcagttg	39480
ttgctctttt ttctcacccc ggtgaactat ctgcccggtc aggtgatgca cttcaaaaag	39540
cctttacaga taaagaggaa ttacttaagc agcaggcatc taaccttcac gagcagaaaa	39600
aagctggggg gatatttgaa gctgaagaag ttatcactct ttttaacttct gtgcttaaaa	39660
cgatcatctgc atcaagaact agtttaagct cacgacatca gtttgctcct ggagcgacag	39720
tattgtataa gggcgataaa atgggtgctta acctggacag gtctcgtgtt ccaactgagt	39780
gtatagagaa aattgaggcc attcttaagg aacttgaaaa gccagcacc tcatgacgacc	39840
acgttttagt ctacgtttat ctgtctttac ttaatgtcct ttgttacagg ccagaaagca	39900
taactggcct gaatattctc tctgggcca ctgttccact tgtatcgtcg gtctgataat	39960
cagactggga ccacgggtccc actcgtatcg tcgggtctgat tattagtctg ggaccacggt	40020
cccactcgta tcgtcgggtc gattattagt ctgggaccac ggtccactc gtatcgtcgg	40080
tctgataatc agactgggac cacgggtcca ctcgatcgt cggtctgatt attagtctgg	40140
gaccatggtc ccactcgtat cgtcgggtctg attattagtc tgggaccacg gtcccactcg	40200
tatcgtcggg ctgattatta gtctggaacc acgggtccac tcgtatcgtc ggtctgatta	40260
ttagtctggg accacggtcc cactcgtatc gtcggtctga ttattagtct gggaccacga	40320

tcccactcgt gttgtcggtc tgattatcgg tctgggacca cgggtcccact tgtattgtcg	40380
atcagactat cagcgtgaga ctacgattcc atcaatgcct gtcaagggca agtattgaca	40440
tgctgctgta acctgtagaa cggagtaacc tcgggtgtgcg gttgtatgcc tgctgtggat	40500
tgctgctgtg tcctgcttat ccacaacatt ttgcgcacgg ttatgtggac aaaatacctg	40560
gttaccagcagg ccgtgccggc acgttaaccg ggctgcatcc gatgcaagtg tgctgctgtc	40620
gacgagctcg cgagctcgga catgaggttg ccccgatttc agtgtcgtg atttgtattg	40680
tctgaagttg tttttacgtt aagttgatgc agatcaatta atacgatacc tgcgtcataa	40740
ttgattatth gacgtggtht gatggcctcc acgcacgttg tgatatgtag atgataatca	40800
ttatcactth acgggtcctt tccgggtgatc cgacaggtht cggggcgggc acctcgcggg	40860
ttttcgctat ttatgaaaat tttccggtht aaggcgthtc cgttcttctt cgtcataact	40920
taatgtthtt atthaaaata ccctctgaaa agaaaggaaa cgacaggthc tgaaagcgag	40980
ctthttggcc tctgtcgtth cthttctctg tthttgtccg tggaatgaac aatggaagtc	41040
cgagctcatc gctaataact tcgtatagca tacattatac gaagttatat tcgatgcggc	41100
cgcaaggggt tcgcgtcagc ggggtgtggc ggggtgtcggg gctggcttaa ctatgcggca	41160
tcagagcaga ttgtactgag agtgcaccat atgcgggtgtg aaataccgca cagatgcgta	41220
aggagaaaat accgcatcag gcgccattcg ccattcaggc tgcgcaactg ttgggaaggg	41280
cgatcggthc gggcctcttc gctattacgc cagctggcga aagggggatg tgctgcaagg	41340
cgattaagth gggtaacgc agggthttcc cagtcacgac gttgtaaaac gacggccagth	41400
gaattgtaat acgactcact atagggcgaa ttcgagctcg gtaccgggg atcctcgtth	41460
aaac	41464

<210> 52

<211> 43711

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<220>

<221> modified_base

<222> (15388)..(15388)

<223> a, c, t, g, unknown or other

<400> 52

catcatcaat aatatacctt attttggatt gaagccaata tgataatgag atgggcggcg	60
cggggcgggg cgcggggcgg gaggcgggtt tgggggcggg ccggcgggcg gggcgggtgtg	120
gcggaagtgg actttgtaag tgtggcggat gtgacttgct agtgccgggc gcggtaaaag	180
tgacgttttc cgtgcgcgac aacgccccg ggaagtgaca tttttccgc ggtttttacc	240
ggatgttgta gtgaatttgg gcgtaaccaa gtaagatttg gccattttcg cgggaaaact	300
gaaacgggga agtgaaatct gattaatttt gcgttagtca taccgcgtaa tatttgtcta	360
gggccgaggg actttggccg attacgtgga ggactcgccc aggtgttttt tgaggtgaat	420
ttccgcgttc cgggtcaaag tctgcgtttt attattatag gatatcccat tgcatacgtt	480
gtatccatat cataatatgt acatttatat tggctcatgt ccaacattac cgccatgttg	540
acattgatta ttgactagtt attaatagta atcaattacg gggtcattag ttcatagccc	600
atatatggag ttccgcgtta cataacttac ggtaaattggc ccgcctggct gaccgccccaa	660
cgacccccgc ccattgacgt caataatgac gtatgttccc atagtaacgc caatagggac	720
tttccattga cgtcaatggg tggagtattt acggtaaact gccacttg cagtacatca	780
agtgtatcat atgccaagta cgccccctat tgacgtcaat gacggtaaatt ggccgcctg	840
gcattatgcc cagtacatga ctttatggga ctttcctact tggcagtaca tctacgtatt	900
agtcatcgct attaccatgg tgatgcgggt ttggcagtac atcaatgggc gtggatagcg	960
gtttgactca cggggatttc caagtctcca cccattgac gtcaatggga gtttgttttg	1020
gcacaaaaat caacgggact ttccaaaatg tcgtaacaac tccgccccat tgacgcaaat	1080
gggcggtagg cgtgtacggt gggaggtcta tataagcaga gctctcccta tcagtgatag	1140
agatctccct atcagtgata gagatcgtcg acgagctcgt ttagtgaacc gtcagatcgc	1200
ctggagacgc catccacgct gttttgacct ccatagaaga caccgggacc gatccagcct	1260
ccgcggccgg gaacggtgca ttggaacgcg gattccccgt gccaagagtg agatcttccg	1320
tttatctagg taccagatat cgccaccatg tccgaggact ttctgattct gatcgccatc	1380
ctggtgatcg tgattctcgt gggcacaatc acaaccctgg tgggcgccat cggcggcatt	1440
agggccagga ggagcttcct cttcatttgc atcttcttcc tgttcctctc cctcttcctg	1500

acaatcctcg ccctgctgct gggcttcagc tggctcctgc tggtaggcat cctgttcttg	1560
gtgctctggc tggatcatcct cattctgctg ctgctggtgt accctattcc tcaccacccc	1620
ctgcccacct ccctcagggt tagaatgaag cagagggtga gcagcgaccc cacaggttct	1680
gacagaagcc ctgaggcgag ccataatagc ctgaactccc ccgatgagga ggaccccaag	1740
gatgacacca agcaacctct gtgcaacatg acccaggggcg gacctcccgt caatggacag	1800
ctcctcggac aacatgctca atgccccct cactatccct gctgccatat tcagcatccc	1860
gacggagagg attccgatgg agacgatggc aagtcctggg gcgatgccgg agaggaagac	1920
aatggcccta acgaccctaa caccgccagc accagagagt ccattttacga ggacctcaga	1980
tacccccaaa gggacgcaa tggcgagtat gagaacgtgg gatacccccc tagggacgga	2040
gatgcccctc ataggctcgg agagcctgtg tatgacgatg tggagcaagc caccgctaac	2100
gaggtgagaa tctccccctt gttcagactg ccctacggaa gcgctttcgg acctggcccc	2160
cagcctggac ccattctgga gagctccaca tggggctttc tggctttcac acagacctcc	2220
ctgttcgccg acgacattgc cgacgtatt agggactact gcacaacca ccctggcccc	2280
acaaggaaca cccagggtgt cctcatgaac ttcgagggca gcggagtgcc cctgcctatg	2340
ttttttcccc ctggagagga gacagaagag cagagagagg gcgatagagc tagcgactcc	2400
gacgagtccg aagacgtca gatcctgacc gtgttctgcc tgttttgcca gtggacactc	2460
tttatctgcc tgggaatcag gatgatctgt aactggaggg gcaaactcac caggatcatc	2520
tgcctgaagt tctgcctcta cggactgatt tccgcctccc tgtccttcgg ctggtacgt	2580
tttctgaagg aagtgacctt ccccaccaca gccaccgttg atcctaggca actccccctg	2640
ttcctcttca tcctgagctc cgtgctggtg attctcgcca tcatgatgga gtttcaaaca	2700
tcctccagcc tcttcgctgc tctgttcgtg attatcgccg gaatgctgtg cgtcacagtg	2760
ggcgtgattt ttctgctggc tggcgtcaag cctctcctga gcggcatgat ctgcgcctcc	2820
ggcatcacia tgctcgtgct cggcgtcgtg ctgctggtgg tgtgcaccag aagccccagc	2880
ccttgtcatc acagggatga acccccctcc agaagcccca gccctcaacc caccgtctcc	2940
gagcagtccc agcagtcccc caggcagcag agccctcaag gcacatccca gggttctaca	3000
agacctcagg tgcctggagg cgccaccacc agaaaaagag gcggcgtgag aggccaacct	3060
gccaagtgtc acggcaagta caccacaacc gccgagggac tgaccgtctt cctgaatagg	3120

aggcacagcc ccaggacatc caacgagggc aggtggatga atggagtcac ggctgtgaac	3180
ctctccaaat ggcccctgta cagcctgagg agagccctgg ccctcgccat ggctcctaga	3240
aggaggctct ccggccctcc ctggctgaca gtgctgctgc tgctgtccac actgagcgtg	3300
gccgccctgc tgattctctt cctgattttc agcgccggcg ccaccattag cacagaagcc	3360
agcctgctgg tcctgctcct gctgtttgtg accctgctgc tgctctcct gtcctccaac	3420
ggactccagc tccctgccgc cctgattctg atccagtgtt tcctcctggc cgctgattat	3480
ctcgcctacc tgattctgcc taccattatg cccaggggca gaagcacagg aaggaagggc	3540
agggacacag agaaagagag gagcagatcc cctctcagag ctcttggcgg ttctgatgga	3600
cccagcaciaa gggctggctg tggagccgga ccctgtcagc tgagcagccc catcgccgga	3660
aacaacggca atgaaggcgg cgagggcgac gactacaaga gctggaggaa gcccgaggaa	3720
gaggacaacg gcccgaatga ccccaatacc aacaacagga ttgaggatgg agacggcgac	3780
gacggaaaat cctggaggaa tcctgaggag gaggataaca gaaagcagga caggctgggc	3840
accaagcctt tcatggccgg ccactggtat gagagcgtga ttcccgccct gttcctctgc	3900
cccctgatcc tcccttccct gttctggatt tgctccctgc tgaccttcct ggtgggccac	3960
ggagccaata ttgtgagcgc cgtcctgttc ctctgtctgg cttggtgtct cctcattgcc	4020
aactggaacg tgacaagaga ggacttcgtg tccggcagga gaagctccat gagcagcctg	4080
tccgtggccg cttccaccgc cacagccatg ttcgccagct tcctcaccct gagctttgat	4140
ggcctgggcc tgctgctgtt tggcaccgcc ctggtgatcc agacaattta cgtgctgtat	4200
ctggtggtca tggagatcac cgtgtggatc atgatgttta ggtatctcca cttttgatc	4260
accctgctgt tcctgctgag ccccattatt ctctccgtcg cctgtctcat catccaatcc	4320
tccgccctgc tgatcgaggc tgtggtcgtc accaccatca cagtcctggc ctttttctg	4380
tggctccctc ctcaaggcgc tgaggccgat ctcggcaccg ccctgctgat tctgaatacc	4440
gccctgtgcc tggctgtgct gatcctgacc gctatcccta catgatgatg agcgcccgcg	4500
atctgctgtg ctttctagtt gccagccatc tgttgtttgc ccctccccg tgccttcctt	4560
gaccctggaa ggtgccactc ccactgtcct ttcctaataa aatgaggaaa ttgcatcgca	4620
ttgtctgagt aggtgtcatt ctattctggg ggggtggggtg gggcaggaca gcaaggggga	4680
ggattgggaa gacaatagca ggcatgctgg ggatgcggtg ggctctatgg ccgatcagcg	4740

atcgctgagg tgggtgagtg ggcgtggcct ggggtggtca tgaaaatata taagttgggg	4800
gtcttaggggt ctctttatct gtgttcgaga gaccgccgga gccatgagcg ggagcagcag	4860
cagcagcagt agcagcagcg ccttggtatgg cagcatcgtg agcccttatt tgacgacgcg	4920
gatgccccac tgggccgggg tgcgtcagaa tgtgatgggc tccagcatcg acggccgacc	4980
cgtcctgccc gcaaattccg ccacgctgac ctatgcgacc gtcgcgggga cgccgttgga	5040
cgccaccgcc gccgccgccg ccaccgcagc cgcctcggcc gtgcgcagcc tggccacgga	5100
ctttgcattc ctgggaccac tggcgacagg ggctacttct cgggccgctg ctgccgccgt	5160
tcgcgatgac aagctgaccg ccctgctggc gcagttggat gcgcttactc gggaactggg	5220
tgacctttct cagcaggtca tggccctgcg ccagcaggtc tcctccctgc aagctggcgg	5280
gaatgcttct cccacaaatg ccgtttaaga taaataaaac cagactctgt ttggattaaa	5340
gaaaagtagc aagtgcattg ctctctttat ttcataatct tccgcgcgcg ataggcccta	5400
gaccagcgtt ctcggtcgtt gaggggtgcgg tgtatcttct ccaggacgtg gtagaggtgg	5460
ctctggacgt tgagatacat gggcatgagc ccgtcccggg ggtggaggta gcaccactgc	5520
agagcttcat gctccgggggt ggtgtttag atgatccagt cgtagcagga gcgctgggca	5580
tggtgcctaa aaatgtcctt cagcagcagg ccgatggcca gggggaggcc cttggtgtaa	5640
gtgtttacaa aacggttaag ttgggaaggg tgcattcggg gagagatgat gtgcatcttg	5700
gactgtatct ttagattggc gatgtttccg ccagatccc ttctgggatt catgtttgtgc	5760
aggaccacca gtacagtgtg tccggtgcac ttggggaatt tgtcatgcag cttagaggga	5820
aaagcgtgga agaacttgga gacgcctttg tggcctcca gattttccat gcattcgtcc	5880
atgatgatgg caatgggccc gcgggaggca gcttgggcaa agatatttct ggggtcgctg	5940
acgtcgtagt tgtgttccag ggtgaggtcg tcataggcca tttttacaaa gcgcgggcgg	6000
agggtgcccc actgggggat gatggtcccc tctggccctg gggcgtagtt gccctcgag	6060
atctgcattt cccaggcctt aatctcggag gggggaatca tatccacctg cggggcgatg	6120
aagaaaacgg tttccggagc cggggagatt aactgggatg agagcaggtt tctaagcagc	6180
tgtgattttc cacaaccggt gggcccataa ataacaccta taaccggttg cagctggtag	6240
tttagagagc tgcagctgcc gtcgtcccgg aggagggggg ccacctcgtt gagcatgtcc	6300
ctgacgcgca tgttctcccc gaccagatcc gccagaaggc gtcgccgcc cagggacagc	6360

agctcttgca aggaagcaaa gtttttcagc ggcttgaggc cgtccgccgt gggcatgttt	6420
ttcagggtct ggctcagcag ctccaggcgg tcccagagct cggtgacgtg ctctacggca	6480
tctctatcca gcatactctc tcgttttcgcg ggttggggcg actttcgctg tagggcacca	6540
agcggtggtc gtccagcggg gccagagtca tgtccttcca tgggcgcagg gtcctcgtca	6600
gggtgggtctg ggtcacgggtg aaggggtgcg ctccgggctg agcgcttgcc aaggtgcgct	6660
tgaggctggt tctgctggtg ctgaagcgct gccggtcttc gccctgcgcg tcggccaggt	6720
agcatttgac catgggtgtca tagtccagcc cctccgcggc gtgtcccttg gcgcgcagct	6780
tgcccttgga ggtggcgccg cacgaggggc agagcaggct cttgagcgcg tagagcttg	6840
gggcgaggaa gaccgattcg ggggagtagg cgtccgcgcc gcagaccccg cacacggtct	6900
cgcactccac cagccagggtg agctcggggc gcgccgggtc aaaaaccagg tttcccccatt	6960
gctttttgat gcgtttctta cctcgggtct ccatgagggtg gtgtccccgc tcggtgacga	7020
agaggctgtc cgtgtctccg tagaccgact tgagggtct tttctccagg ggggtccctc	7080
ggtcttcctc gtagaggaac tcggaccact ctgagacgaa ggcccgcgtc caggccagga	7140
cgaaggaggc tatgtgggag gggtagcgggt cgttgtccac taggggggtcc accttctcca	7200
agggtgtgaag acacatgtcg ccttcctcgg cgtccaggaa ggtgattggc ttgtaggtgt	7260
aggccacgtg accggggggtt cctgacgggg ggggtataaaa ggggggtgggg gcgcgctcgt	7320
cgtcactctc ttccgcatcg ctgtctgcga gggccagctg ctgggggtgag tattccctct	7380
cgaaggcggg catgacctc gcgctgagggt tgtcagtttc caaaaacgag gaggatttga	7440
tgttcacctg tcccagggtg atacctttga gggtagccgc gtccatctgg tcagaaaaca	7500
cgatcttttt attgtccagc ttggtggcga acgaccgta gagggcgttg gagagcagct	7560
tggcgatgga gcgcagggtc tggttcttgt ccctgtcggc gcgctccttg gccgcgatgt	7620
tgagctgcac gtactcgcgc gcgacgcagc gccactcggg gaagacgggtg gtgcgctcgt	7680
cgggcaccag gcgcacgcgc cagccgcgggt tgtgcagggt gaccagggtc acgctggtgg	7740
cgacctcgcc gcgcaggcgc tcgttgggtc agcagagacg gccgcccttg cgcgagcaga	7800
agggggggcag ggggtcgagc tgggtctcgt ccgggggggtc cgcgtccacg gtgaaaaccc	7860
cggggcgag gcgcgcgtcg aagtagtcta tcttgcaacc ttgcatgtcc agcgcctgct	7920
gccagtcgcg ggccggcagc gcgcgctcgt aggggttgag cggcggggcc cagggcattg	7980

ggtgggtgag tgcggaggcg tacatgccgc agatgtcata gacgtagagg ggctcccgca	8040
ggaccccgat gtaggtgggg tagcagcggc cgccgcggat gctggcgcg acgtagtcat	8100
acagctcgtg cgagggggcg aggaggtcgg ggcccagggtt ggtgcgggcg gggcgctccg	8160
cgcggaagac gatctgcctg aagatggcat gcgagttgga agagatggtg gggcgctgga	8220
agacgttgaa gctggcgctc tgcaggccga cggcgtcgcg cacgaaggag gcgtaggagt	8280
cgcgcagctt gtgtaccagc tcggcgggtga cctgcacgtc gagcgcgag tagtcgaggg	8340
tctcgcggat gatgtcatat ttagcctgcc ctttcttttt ccacagctcg cggttgagga	8400
caaaactctt gcggtctttc cagtactctt ggatcgggaa accgtccggt tccgaacggt	8460
aagagcctag catgtagaac tggttgacgg cctggtaggc gcagcagccc ttctccacgg	8520
ggagggcgta ggcctgcgcg gccttgcgga gcgaggtgtg ggtcagggcg aaggtgtccc	8580
tgaccatgac tttgaggtac tggtgcttga agtcggagtc gtcgcagccg ccccgctccc	8640
agagcgagaa gtcggtgcgc ttcttgagc gggggttggg cagagcgaag gtgacatcgt	8700
tgaagaggat tttgcccgcg cggggcatga agttgcgggt gatgcggaag ggccccggca	8760
cttcagagcg gttgttgatg acctgggagg cgagcacgat ctctcgaag ccgttgatgt	8820
tgtggccac gatgtagagt tccaggaagc ggggccggcc ctttacggtg ggcagcttct	8880
ttagctcttc gtaggtgagc tcctcgggcg aggcgaggcc gtgctcggcc agggcccagt	8940
ccgcgaggtg cgggttgctt ctgaggaagg acttccagag gtcgcgggccc aggagggtct	9000
gcaggcggtc tctgaaggtc ctgaactggc ggcccacggc catTTTTTcg ggggtgatgc	9060
agtagaagggt gagggggtct tgctgccagc ggtcccagtc gagctgcagg gcgaggtcgc	9120
gcgcggcgggt gaccaggcgc tcgtcgcccc cgaatttcat gaccagcatg aagggcacga	9180
gctgctttcc gaaggcccc atccaagtgt aggtctctac atcgtaggtg acaaagaggc	9240
gctccgtgcg aggatgcgag ccgatacggga agaactggat ctcccggcac cagttggagg	9300
agtggctgtt gatgtggtgg aagtagaagt cccgtcgccg ggccgaacac tcgtgctggc	9360
ttttgtaaaa gcgagcgag tactggcagc gctgcacggg ctgtacctca tgcacgagat	9420
gcacctttcg cccgcgcacg aggaagccga ggggaaatct gagcccccg cctggctcgc	9480
ggcatggctg gttctcttct actttggatg cgtgtccgtc tccgtctggc tcctcgaggg	9540
gtgttacgggt ggagcggacc accacgccgc gcgagccgca ggtccagata tcggcgcgcg	9600

gcggtcggag	tttgatgacg	acatcgcgca	gctgggagct	gtccatggtc	tggagctccc	9660
gcggcggcgg	caggtcagcc	gggagttctt	gcaggttcac	ctcgcagagt	cgggccaggg	9720
cgcggggcag	gtctaggtgg	tacctgatct	ctaggggctg	gttggtggcg	gcgtcgatgg	9780
cttgaggag	cccgcagccc	cggggggcga	cgacgggtgc	ccgcggggtg	gtggtggtgg	9840
tggcggtgca	gctcagaagc	ggtgccgcgg	gcgggcccc	ggaggtaggg	ggggctccgg	9900
tcccgcgggc	aggggcggca	gcggcacgtc	ggcgtggagc	gcgggcagga	gttggtgctg	9960
tgcccggagg	ttgctggcga	aggcgacgac	gcggcggttg	atctcctgga	tctggcgctt	10020
ctgcgtgaag	acgacgggcc	cggtgagctt	gaacctgaaa	gagagttcga	cagaatcaat	10080
ctcgggtgtca	ttgaccgcgg	cctggcgag	gatctcctgc	acgtctcccg	agttgtcttg	10140
gtaggcgatc	tcggccatga	actgctcgat	ctcttcctcc	tggaggtctc	cgcgtccggc	10200
gcgttccacg	gtggccgcca	ggtcgttgga	gatgcgcccc	atgagctgcg	agaaggcggt	10260
gagtccgccc	tcgttccaga	ctcggctgta	gaccacgccc	ccctggtcat	cgcgggcgcg	10320
catgaccacc	tgcgcgaggt	tgagctccac	gtgccgcgcg	aagacggcgt	agttgcgcag	10380
acgctggaag	aggtagttga	gggtggtggc	ggtgtgctcg	gccacgaaga	agttcatgac	10440
ccagcggcgc	aacgtggatt	cgttgatgtc	ccccaaggcc	tccagccggt	ccatggcctc	10500
gtagaagtcc	acggcgaagt	tgaaaaactg	ggagttgcgc	gccgacacgg	tcaactcctc	10560
ctccagaaga	cggatgagct	cggcgacggg	gtcgcgcacc	tcgcgctcga	aggctatggg	10620
gatctcttcc	tccgctagca	tcaccacctc	ctcctcttcc	tcctcttctg	gcacttccat	10680
gatggcttcc	tcctcttcgg	ggggtggcgg	cggcggcggt	gggggagggg	gcgctctgcg	10740
ccggcggcgg	cgcaccggga	ggcgggtccac	gaagcgcgcg	atcatctccc	cgcggcggcg	10800
gcgcatggtc	tcggtgacgg	cgcggccggt	ctcccggggg	cgcagttgga	agacgccgcc	10860
ggacatctgg	tgctggggcg	ggtggccgtg	aggcagcgag	acggcgctga	cgatgcatct	10920
caacaattgc	tgcgtaggta	cgccgccgag	ggacctgagg	gagtccatat	ccaccggatc	10980
cgaaaacctt	tcgaggaagg	cgtctaacca	gtcgcagtcg	caaggtaggc	tgagcaccgt	11040
ggcgggcggc	gggggggtggg	gggagtgtct	ggcggagggtg	ctgctgatga	tgtaattgaa	11100
gtaggcggac	ttgacacggc	ggatggtcga	caggagcacc	atgtccttgg	gtccggcctg	11160
ctggatgcgg	aggcggtcgg	ctatgcccc	ggcttcgttc	tggcatcggc	gcaggtcctt	11220

gtagtagtct tgcattgagcc tttccaccgg cacctcttct ctttctcttt ctgcttcttc	11280
catgtctgct tcggccctgg ggcggcgccg cgccccctg ccccccattgc gcgtgacccc	11340
gaacccccctg agcgggttggg gcaggggccag gtcggcgacg acgcgctcgg ccaggatggc	11400
ctgctgcacc tgcgtgaggg tggtttggaa gtcattcaag tccacgaagc ggtggttaggc	11460
gcccgtgttg atggtgtagg tgcagttggc catgacggac cagttgacgg tctggtggcc	11520
cggttgcgac atctcggtgt acctgagtcg cgagtaggcg cgggagtcga agacgtagtc	11580
gttgcaagtc cgcaccaggt actggttagc caccaggaag tgcggcgccg gctggcggtg	11640
gaggggccag cgcaggggtg cgggggctcc gggggccagg tcttccagca tgaggcgggtg	11700
gtaggcgtag atgtacctgg acatccaggt gatacccgcg gcggtggtgg aggcgcgcgg	11760
gaagtcgcgc acccggttcc agatgttgcg caggggcaga aagtgtcca tggtaggcgt	11820
gctctgtcca gtcagacgcg cgcagtcgtt gatactctag accagggaac acgaaagccg	11880
gtcagcgggc actcttccgt ggtctggtga atagatcgca aggttatcat ggcggagggc	11940
ctcggttcga gccccgggtc cgggcccggc ggtccgccat gatccacgcg gttaccgccc	12000
gcgtgtcgaa cccaggtgtg cgacgtcaga caacgggtgga gtgttccttt tggcgttttt	12060
ctggccgggc gccggcgccg cgtaagagac taagccgcga aagcgaaagc agtaagtggc	12120
tcgctccccg tagccggagg gatccttgct aagggttgcg ttgcggcgaa ccccggttcg	12180
aatcccgtac tcgggcccgc cggacccgcg gctaaggtgt tggattggcc tccccctcgt	12240
ataaagaccc cgcttgcgga ttgactccgg acacggggac gagccccttt tatttttgc	12300
ttccccagat gcatccggtg ctgcggcaga tgcgcccccc gccccagcag cagcaacaac	12360
accagcaaga gcggcagcaa cagcagcggg agtcatgcag ggccccctca cccaccctcg	12420
gcgggcccgc cacctcggcg tccgcggccg tgtctggcgc ctgcggcggc ggcggggggc	12480
cggctgacga ccccgaggag ccccgcggc gcagggccag acactacctg gacctggagg	12540
agggcgaggg cctggcgcg cgtctcccga gcgccacccg cgggtgcagc	12600
tgaagcgca ctcgcgcgag gcgtacgtgc ctcggcagaa cctgttcagg gaccgcgcgg	12660
gcgaggagcc cgaggagatg cgggacagga ggttcagcgc agggcgggag ctgcggcagg	12720
ggctgaaccg cgagcggctg ctgcgcgagg aggactttga gcccgcgcg cggacgggga	12780
tcagccccgc gcgcgcgcac gtggcggccg ccgacctggt gacggcgtag gagcagacgg	12840

tgaaccagga gatcaacttc caaaagagtt tcaacaacca cgtgcgcacg ctggtggcgc	12900
gcgaggaggt gaccatcggg ctgatgcacc tgtgggactt tgtaagcgcg ctggtgcaga	12960
acccaacag caagcctctg acggcgcagc tgttcctgat agtgcagcac agcagggaca	13020
acgaggcgtt tagggacgcg ctgctgaaca tcaccgagcc cgagggtcgg tggctgctgg	13080
acctgattaa catcctgcag agcatagtgg tgcaggagcg cagcctgagc ctggccgaca	13140
aggtggcggc catcaactac tcgatgctga gcctgggcaa gttttacgcg cgcaagatct	13200
accagacgcc gtacgtgccc atagacaagg aggtgaagat cgacggtttt tacatgcgca	13260
tggcgctgaa ggtgctcacc ctgagcgacg acctgggcgt gtaccgcaac gagcgcatcc	13320
acaaggccgt gagcgtgagc cggcggcgcg agctgagcga ccgcgagctg atgcacagcc	13380
tgcagcgggc gctggcgggc gccggcagcg gcgacaggga ggaggagtcc tacttcgatg	13440
cgggggcgga cctgcgctgg gcgcccagcc ggaggcccgcg ggggtccgcg	13500
aggactatga cgaggacggc gaggaggatg aggagtacga gctagaggag ggcgagtacc	13560
tggactaaac cgcgggtggt gtttcggta gatgcaagac ccgaacgtgg tggaccggc	13620
gctgcggcg gctctgcaga gccagccgtc cggccttaac tcctcagacg actggcgaca	13680
ggtcatggac cgcatcatgt cgctgacggc gcgtaacccg gacgcgttcc ggcagcagcc	13740
gcaggccaac aggctctccg ccatacctgga ggcggtggtg cctgcgcgct cgaacccac	13800
gcacgagaag gtgctggcca tagtgaacgc gctggccgag aacagggcca tccgccgga	13860
cgaggccggg ctggtgtacg acgcgctgct gcagcgcgtg gcccgtaca acagcggcaa	13920
cgtgcagacc aacctggacc ggctggtggg ggacgtgcgc gaggcggtgg cgcagcgcga	13980
gcgcgcggat cggcagggca acctgggctc catggtggcg ctgaatgcct tcctgagcac	14040
gcagccggcc aacgtgccgc gggggcagga agactacacc aactttgtga gcgcgctgcg	14100
gctgatggtg accgagaccc ccagagcga ggtgtaccag tcgggcccgg actacttctt	14160
ccagaccagc agacagggcc tgcagacggt gaacctgagc caggctttca agaacctgcg	14220
ggggctgtgg ggcgtgaagg cggccaccgg cgaccggcg acggtgtcca gcctgctgac	14280
gccaactcg cgcctgctgc tgctgctgat cgcgccgttc acggacagcg gcagcgtgtc	14340
ccgggacacc tacctggggc acctgctgac cctgtaccgc gaggccatcg ggcaggcgca	14400
ggtggacgag cacaccttcc aggagatcac cagcgtgagc cgcgcgctgg ggcaggagga	14460

cacgagcagc	ctggaggcga	ctctgaacta	cctgctgacc	aaccggcggc	agaagattcc	14520
ctcgctgcac	agcctgacct	ccgaggagga	gcgcatcttg	cgctacgtgc	agcagagcgt	14580
gagcctgaac	ctgatgcgcg	acgggggtgac	gcccagcgtg	gcgctggaca	tgaccgcgcg	14640
caacatggaa	ccgggcatgt	acgccgcgca	ccggccttac	atcaaccgcc	tgatggacta	14700
cctgcatcgc	gcggcggccg	tgaaccccga	gtactttacc	aacgccatcc	tgaacccgca	14760
ctggctcccg	ccgcccgggt	tctacagcgg	gggcttcgag	gtcccggaga	ccaacgatgg	14820
cttcctgtgg	gacgacatgg	acgacagcgt	gttctccccg	cggccgcagg	cgctggcgga	14880
agcgtccctg	ctgcgtccca	agaaggagga	ggaggaggag	gcgagtcgcc	gccgcggcag	14940
cagcggcgtg	gcttctctgt	ccgagctggg	ggcggcagcc	gccgcgcgcc	ccgggtccct	15000
gggcggcagc	ccctttccga	gcctgggtggg	gtctctgcac	agcgagcgca	ccacccgccc	15060
tcggctgctg	ggcgaggacg	agtacctgaa	taactccctg	ctgcagccgg	tgcgggagaa	15120
aaacctgcct	cccgcttcc	ccaacaacgg	gatagagagc	ctggtggaca	agatgagcag	15180
atggaagacc	tatgcgcagg	agcacaggga	cgcgctgcg	ctccggccgc	ccacgcggcg	15240
ccagcgccac	gaccggcagc	gggggctggg	gtgggatgac	gaggactccg	cggacgatag	15300
cagcgtgctg	gacctgggag	ggagcggcaa	cccgttcgcg	cacctgcgcc	ccgcctggg	15360
gaggatgttt	taaaaaaaaa	aaaaaaangc	aagaagcatg	atgcaaaaat	taaataaaac	15420
tcaccaaggc	catggcgacc	gagcgttggg	ttcttgtgtt	cccttcagta	tgcggcgcgc	15480
ggcgatgtac	caggaggggac	ctcctccctc	ttacgagagc	gtggtgggcg	cggcggcggc	15540
ggcgccctct	tctccctttg	cgtcgcagct	gctggagccg	ccgtacgtgc	ctccgcgcta	15600
cctgcggcct	acggggggga	gaaacagcat	ccgttactcg	gagctggcgc	ccctgttcga	15660
caccacccgg	gtgtacctgg	tggacaacaa	gtcggcggac	gtggcctccc	tgaactacca	15720
gaacgaccac	agcaattttt	tgaccacggg	catccagaac	aatgactaca	gcccgagcga	15780
ggccagcacc	cagaccatca	atctggatga	ccggtcgcac	tggggcggcg	acctgaaaac	15840
catcctgcac	accaacatgc	ccaacgtgaa	cgagttcatg	ttcaccaata	agttcaaggc	15900
gcgggtgatg	gtgtcgcgct	cgcacaccaa	ggaagaccgg	gtggagctga	agtacgagtg	15960
ggtggagttc	gagctgccag	agggcaacta	ctccgagacc	atgaccattg	acctgatgaa	16020
caacgcgatc	gtggagcact	atctgaaagt	gggcaggcag	aacgggggtcc	tggagagcga	16080

catcggggtc aagttcgaca ccaggaactt ccgcctgggg ctggaccccg tgaccgggct	16140
ggttatgccc ggggtgtaca ccaacgaggc cttccatccc gacatcatcc tgctgcccgg	16200
ctgcgggggtg gacttcactt acagccgcct gagcaacctc ctgggcatcc gcaagcggca	16260
gcccttccag gagggcttca ggatcaccta cgaggacctg gaggggggca acatccccgc	16320
gctcctcgat gtggaggcct accaggatag cttgaaggaa aatgaggcgg gacaggagga	16380
taccgcccc gccgcctccg ccgccgccga gcagggcgag gatgctgctg acaccgcggc	16440
cgcggacggg gcagaggccg accccgctat ggtggtggag gctcccagc aggaggagga	16500
catgaatgac agtgcggtgc gcggagacac cttcgtcacc cggggggagg aaaagcaagc	16560
ggaggccgag gccgcggccg aggaaaagca actggcggca gcagcggcgg cggcggcggtt	16620
ggccgcggcg gaggtgagt ctgaggggac caagcccgc aaggagcccg tgattaagcc	16680
cctgaccgaa gatagcaaga agcgcagtta caacctgctc aaggacagca ccaacaccgc	16740
gtaccgcagc tggtacctgg cctacaacta cggcgacccg tcgacggggg tgcgctcctg	16800
gacctgctg tgcacgccgg acgtgacctg cggctcggag caggtgtact ggtcgctgcc	16860
cgacatgatg caagaccccc tgaccttccg ctccacgcgg caggtcagca acttcccgtt	16920
ggtgggcgcc gagctgctgc ccgtgcactc caagagcttc tacaacgacc aggccgtcta	16980
ctcccagctc atccgccagt tcacctctct gaccacgtg ttcaatcgct ttcctgagaa	17040
ccagattctg gcgcgcccgc ccgccccac catcaccacc gtcagtgaag acgttcctgc	17100
tctcacagat cacgggacgc taccgtgcg caacagcatc ggaggagtcc agcgagtgc	17160
cgttactgac gccagacgcc gcacctgccc ctacgtttac aaggccttgg gcatagtctc	17220
gccgcgcgtc ctttccagcc gcactttttg agcaacacca ccatcatgtc catcctgatc	17280
tcaccagca ataactccgg ctggggactg ctgcgcgcgc ccagcaagat gttcggaggg	17340
gcgaggaagc gttccgagca gcacccgtg cgcgtgcgcg ggcaattccg cgccccctgg	17400
ggagcgaca aacgcggccg cgcggggcgc accaccgtgg acgacgccat cgactcggtg	17460
gtggagcagg cgcgcaacta caggcccgcg gtctctaccg tggacgcggc catccagacc	17520
gtggtgcggg gcgcgcggcg gtacgccaag ctgaagagcc gccggaagcg cgtggcccgc	17580
cgccaccgcc gccgacccgg ggccgccgcc aaacgcgccg ccgcggccct gcttcgccgg	17640
gccaagcgca cgggccgccg cgccgcatg agggccgcgc gccgcttggc cgccggcatc	17700

accgccgcca ccatggcccc ccgtacccga agacgcgcgg ccgccgccgc cgccgccgcc	17760
atcagtgaca tggccagcag gcgccggggc aacgtgtact ggggtgcgca ctcggtgacc	17820
ggcacgcgcg tgcccgtgcg cttccgcccc ccgcggactt gagatgatgt gaaaaaacia	17880
cactgagtct cctgctgttg tgtgtatccc agcggcggcg gcgcgcgcag cgtcatgtcc	17940
aagcgcaaaa tcaaagaaga gatgctccag gtcgtcgcgc cggagatcta tgggcccccg	18000
aagaaggaag agcaggattc gaagccccgc aagataaagc ggggtcaaaaa gaaaaagaaa	18060
gatgatgacg atgccgatgg ggaggtggag ttcctgcgcg ccacggcgcc caggcgcccc	18120
gtgcagtgga agggccggcg cgtaaagcgc gtcctgcgcc ccggcaccgc ggtggtcttc	18180
acgccccggcg agcgctccac ccggactttc aagcgcgtct atgacgaggt gtacggcgac	18240
gaagacctgc tggagcaggc caacgagcgc ttcggagagt ttgcttacgg gaagcgtcag	18300
cgggcgctgg ggaaggagga cctgctggcg ctgccgctgg accagggcaa cccaccccc	18360
agtctgaagc ccgtgaccct gcagcaggtg ctgccgagca gcgcaccctc cgaggcgaag	18420
cggggctctga agcgcgaggg cggcgacctg gcgcccaccg tgcagctcat ggtgcccag	18480
cggcagaggc tggaggatgt gctggagaaa atgaaagtag accccggtct gcagccggac	18540
atcagggtcc gccccatcaa gcaggtggcg ccgggcctcg gcgtgcagac cgtggacgtg	18600
gtcatcccca ccggcaactc ccccgccgcc gccaccacta ccgctgcctc cacggacatg	18660
gagacacaga ccgatccgc cgagccgca gccgcagccg ccgccgcgac ctctcggcg	18720
gaggtgcaga cggaccctg gctgccgccg gcgatgtcag ctcccgcgc gcgtcgcggg	18780
cgcaggaagt acggcgccgc caacgcgtc ctgcccagat acgccttgca tccttccatc	18840
gcgcccaccc ccggctaccg aggctatacc taccgcccgc gaagagccaa gggttccacc	18900
cgccgtcccc gccgacgcgc cgccgccacc acccgccgcc gccgccgag acgccagccc	18960
gactggctc cagtctccgt gaggaaagt gcgcgcgac gacacaccct ggtgctgccc	19020
agggcgcgct accacccag catcgtttaa aagcctgttg tggttcttg agatatggcc	19080
ctcacttgcc gcctccgttt cccggtgccg ggataccgag gaggaagatc gcgccgcagg	19140
aggggtctgg ccggccgcgg cctgagcgga ggcagccgcc gcgcgcaccg gcggcgacgc	19200
gccaccagcc gacgcatgcg cggcggggtg ctgcccctgt taatccccct gatcgccgcg	19260
gcgatcggcg ccgtgcccgg gatcgctcc gtggccttg aagcgtcca gaggcattga	19320

cagacttgca aacttgcaaa tatggaaaaa aaaaccccaa taaaaaagtc tagactctca	19380
cgctcgcttg gtcctgtgac tattttgtag aatggaagac atcaactttg cgctcgctggc	19440
cccgcgtcac ggctcgcgcc cgttcctggg acactggaac gatatcggca ccagcaacat	19500
gagcgggtggc gccttcagtt ggggctctct gtggagcggc attaaaagta tcgggtctgc	19560
cgtaaaaaat tacggctccc gggcctggaa cagcagcacg ggccagatgt tgagagacaa	19620
gttgaaagag cagaacttcc agcagaaggt ggtggagggc ctggcctccg gcatcaacgg	19680
ggtggtggac ctggccaacc aggccgtgca gaataagatc aacagcagac tggacccccg	19740
gccgccggtg gaggaggtgc cgccggcgct ggagacggtg tccccgatg ggcgtggcga	19800
gaagcgcccc cgggccgata gggaagagac cactctggtc acgcagaccg atgagccgcc	19860
cccgtatgag gaggccctga agcaaggtct gccaccacg cggcccatcg cgcccatggc	19920
caccgggggtg gtgggccgcc acacccccgc cacgctggac ttgcctccgc ccgccgatgt	19980
gccgcagcag cagaaggcgg cacagccggg ccgcccgcg accgcctccc gttcctccgc	20040
cggtcctctg cgccgcgcgg ccagcggccc ccgcgggggg gtcgcgaggc acggcaactg	20100
gcagagcacg ctgaacagca tcgtgggtct gggggtgcgg tccgtgaagc gccgccgatg	20160
ctactgaata gcttagctaa cgtgttgatg gtgtgtatgc gccctatgtc gccgccagag	20220
gagctgctga gtcgccgccg ttcgcgcgcc caccaccacc gccactccgc ccctcaagat	20280
ggcgaccca tcgatgatgc cgcagtggtc gtacatgcac atctcgggcc aggacgcctc	20340
ggagtacctg agccccgggc tgggtgcagtt cgcccgcgcc accgagagct acttcagcct	20400
gagtaacaag tttaggaacc ccacggtggc gcccacgcac gatgtgacca ccgaccggtc	20460
tcagcgcttg acgctgcggt tcattcccgt ggaccgcgag gacaccgct actcgtacaa	20520
ggcgcggttc accctggccg tgggcgacaa ccgcgtgctg gacatggcct ccacctactt	20580
tgacatccgc ggggtgctgg accggggtcc cactttcaag ccctactctg gcaccgccta	20640
caactccctg gcccccaagg gcgctcccaa ctctgcgag tgggagcaag aggaaactca	20700
ggcagttgaa gaagcagcag aagaggaaga agaagatgct gacggtcaag ctgaggaaga	20760
gcaagcagct accaaaaaga ctcatgtata tgctcaggct cccctttctg gcgaaaaaat	20820
tagtaaagat ggtctgcaaa taggaacgga cgctacagct acagaacaaa aacctattta	20880
tgagaccct acattccagc ccgaaccca aatcggggag tcccagtgga atgaggcaga	20940

tgctacagtc gccggcggtg agtgctaaa gaaatctact cccatgaaac catgctatgg	21000
ttcctatgca agaccacaa atgctaattg aggtcagggt gtactaacgg caaatgccca	21060
gggacagcta gaatctcagg ttgaaatgca attcttttca acttctgaaa acgcccgtaa	21120
cgaggctaac aacattcagc ccaaattggt gctgtatagt gaggatgtgc acatggagac	21180
cccggatacg caccttttctt acaagcccgc aaaaagcgat gacaattcaa aaatcatgct	21240
gggtcagcag tccatgccca acagacctaa ttacatcggc ttcagagaca actttatcgg	21300
cctcatgtat tacaatagca ctggcaacat gggagtgcct gcaggtcagg cctctcagtt	21360
gaatgcagtg gtggacttgc aagacagaaa cacagaactg tcctaccagc tcttgcttga	21420
ttccatgggt gacagaacca gatacttttc catgtggaat caggcagtgg acagttatga	21480
cccagatgtt agaattattg aaaatcatgg aactgaagac gagctcccca actattgttt	21540
ccctctgggt ggcatagggg taactgacac ttaccaggct gttaaaacca acaatggcaa	21600
taacgggggc caggtgactt ggacaaaaga tgaaactttt gcagatcgca atgaaatagg	21660
ggtgggaaac aatttcgcta tggagatcaa cctcagtgcc aacctgtgga gaaacttcct	21720
gtactccaac gtggcgctgt acctaccaga caagcttaag tacaaccctt ccaatgtgga	21780
catctctgac aacccaaca cctacgatta catgaacaag cgagtgggtg ccccggggct	21840
ggtggactgc tacatcaacc tgggcgcgcg ctggctcgtg gactacatgg acaacgtcaa	21900
ccccttcaac caccaccgca atgcgggcct gcgctaccgc tccatgctcc tgggcaacgg	21960
gcgctacgtg cccttcaca tccagggtgcc ccagaagttc tttgccatca agaacctcct	22020
cctcctgccg ggctcctaca cctacgagtg gaacttcagg aaggatgtca acatggctcct	22080
ccagagctct ctgggtaacg atctcagggt ggacggggcc agcatcaagt tcgagagcat	22140
ctgcctctac gccaccttct tccccatggc ccacaacacg gcctccacgc tcgaggccat	22200
gctcaggaac gacaccaacg accagtcctt caatgactac ctctccgccg ccaacatgct	22260
ctaccccata cccgccaacg ccaccaacgt ccccatctcc atcccctcgc gcaactgggc	22320
ggccttccgc ggctgggcct tcacccgcct caagaccaag gagaccccct ccctgggctc	22380
gggattcgac ccctactaca cctactcggg ctccattccc tacctggacg gcaccttcta	22440
cctcaaccac actttcaaga aggtctcgggt caccttcgac tcctcgggtca gctggccggg	22500
caacgaccgt ctgctcacc ccaacgagtt cgagatcaag cgctcgggtc acggggaggg	22560

ctacaacgtg gccagtgca acatgaccaa ggactggttc ctggtccaga tgctggccaa	22620
ctacaacatc ggctaccagg gcttctacat cccagagagc tacaaggaca ggatgtactc	22680
cttcttcagg aacttccagc ccatgagccg gcaggtggtg gaccagacca agtacaagga	22740
ctaccaggag gtgggcatca tccaccagca caacaactcg ggcttcgtgg gctacctcgc	22800
ccccaccatg cgcgaggagc aggcctaccc cgccaacttc ccctatccgc tcataggcaa	22860
gaccgcggtc gacagcatca cccagaaaaa gttcctctgc gaccgcaccc tctggcgcac	22920
ccccttctcc agcaacttca tgtccatggg tgcgctctcg gacctgggcc agaacttgct	22980
ctacgccaac tccgcccacg ccctcgacat gaccttcgag gtcgaccca tggacgagcc	23040
cacccttctc tatgttctgt tcgaagtctt tgacgtggtc cgggtccacc agccgcaccg	23100
cggcgtcatc gagaccgtgt acctgcgtac gcccttctcg gccggcaacg ccaccaccta	23160
aagaagcaag ccgcagtcac cgccgcctgc atgccgtcgg gttccaccga gcaagagctc	23220
agggccatcg tcagagacct gggatgcggg ccctatTTTT tgggcacctt cgacaagcgc	23280
ttccctggct ttgtctcccc acacaagctg gcctgcgcca tcgtcaacac ggccggccgc	23340
gagaccgggg gcgtgcactg gctggccttc gcctggaacc cgcgctcaa aacatgcttc	23400
ctctttgacc ctttcggctt ttcggaccag cggctcaagc aaatctacga gttcgagtac	23460
gagggttgc tgcgtcgag cgccatcgcc tcctcgccc accgctgcgt caccctcgaa	23520
aagtccaccc agaccgtgca ggggcccagc tcggccgcct gcggtctctt ctgctgcatg	23580
tttctgcacg cttttgtgca ctggcctcag agtcccatgg accgcaaccc caccatgaac	23640
ttgctgacgg gggtgcccaa ctccatgctc cagagcccc aggtcgagcc caccctgcgc	23700
cgcaaccagg agcagctcta cagcttctg gagcgccact cgccttactt ccgccgccac	23760
agcgcacaga tcaggagggc cacctccttc tgccacttgc aagagatgca agaagggtaa	23820
taacgatgta cacacttttt ttctcaataa atggcatctt tttatttata caagctctct	23880
ggggtattca tttcccacca ccaccgccg ttgtcgccat ctggctctat ttagaaatcg	23940
aaagggttct gccgggagtc gccgtgcgcc acgggcaggg acacgttgcg atactggtag	24000
cgggtgcccc acttgaactc gggcaccacc aggcgaggca gctcggggaa gttttcgctc	24060
cacaggctgc gggtcagcac cagcgcgttc atcaggtcgg gcgccgagat cttgaagtcg	24120
cagttggggc cgccgccctg cgcgcgcgag ttgcggtaca ccgggttgca gactggaac	24180

accaacagcg ccgggtgctt cacgctggcc agcacgctgc ggtcggagat cagctcggcg	24240
tccaggtcct ccgcgttgct cagcgcgaac ggggtcatct tgggcacttg ccgccccagg	24300
aagggcgcgt gccccggttt cgagttgcag tcgcagcgca gcgggatcag caggtgcccg	24360
tgcccggact cggcgttggg gtacagcgcg cgcatgaagg cctgcatctg gcggaaggcc	24420
atctgggcct tggcgccctc cgagaagaac atgccgcagg acttgcccga gaactggttt	24480
gcggggcagc tggcgtcgtg caggcagcag cgcgctcgg tgttggcgat ctgcaccacg	24540
ttgcgcccc accggttctt cacgatcttg gccttggacg attgctcctt cagcgcgcgc	24600
tgcccgttct cgctggtcac atccatctcg atcacatgtt cttgtttcac catgctgctg	24660
ccgtgcagac acttcagctc gccctccgtc tcggtgcagc ggtgctgcca cagcgcgcag	24720
cccgtgggct cgaaagactt gtaggtcacc tccgcgaagg actgcaggta cccctgcaaa	24780
aagcggccca tcatggtcac gaaggtcttg ttgctgctga aggtcagctg cagcccgcgg	24840
tgctcctcgt tcagccaggt cttgcacacg gccgccagcg cctccacctg gtcgggcagc	24900
atcttgaagt tcaccttcag ctcatctctc acgtgggtact tgtccatcag cgtgcgcgcc	24960
gcctccatgc ctttctccca ggccgacacc agcggcaggc tcacgggggtt cttcaccatc	25020
accgtggccg ccgcctccgc cgcgctttcg ctttccgccc cgctgtttctc ttctctttcc	25080
tcctcttcct cgccgccgcc cactcgcagc ccccgcacca cggggtcgtc ttcttgcagg	25140
cgctgcacct tgcgcttgcc gttgcgcccc tgcttgatgc gcacgggcgg gttgctgaag	25200
cccacatca ccagcgcggc ctcttcttgc tcgtcctcgc tgtccagaat gacctccggg	25260
gaggggggggt tggatcatct cagtaccgag gcacgcttct ttttcttcct gggggcgttc	25320
gccagctccg cggctgcggc cgctgccgag gtcgaaggcc gagggctggg cgtgcgcggc	25380
accagcgcgt cctgcgagcc gtcctcgtcc tcctcggact cgagacggag gcgggcccgc	25440
ttcttcgggg gcgcgcgggg cggcggaggc ggcggcggcg acggagacgg ggacgagaca	25500
tcgtccaggg tgggtggacg gcgggccgcg ccgcgtccgc gtcgggggt ggtctcgcgc	25560
tggtcctctt cccgactggc catctcccac tgctccttct cctataggca gaaagagatc	25620
atggagtctc tcatgcgagt cgagaaggag gaggacagcc taaccgcccc ctctgagccc	25680
tccaccaccg ccgccaccac cgccaatgcc gccgcggacg acgcgccac cgagaccacc	25740
gccagtagca ccctccccag cgacgcaccc ccgctcgaga atgaagtgct gatcgagcag	25800

gacccgggtt ttgtgagcgg agaggaggat gaggtggatg agaaggagaa ggaggaggtc	25860
gccgcctcag tgccaaaaga ggataaaaag caagaccagg acgacgcaga taaggatgag	25920
acagcagtcg ggcgggggaa cggaagccat gatgctgatg acggctacct agacgtggga	25980
gacgacgtgc tgcttaagca cctgcaccgc cagtgcgtca tcgtctgcga cgcgctgcag	26040
gagcgctgcg aagtgtccct ggacgtggcg gaggtcagcc gcgcctacga gcggcacctc	26100
ttcgcgccgc acgtgcccc caagcgccgg gagaacggca cctgcgagcc caacccgcgt	26160
ctcaacttct acccggctct cgcggtacct gaggtgctgg ccacctacca catctttttc	26220
caaaactgca agatccccct ctctgccgc gccaacgcga cccgcgccga caaaaccctg	26280
accctgcggc agggcgccca catacctgat atcgcctctc tggaggaagt gcccaagatc	26340
ttcgagggtc tcggtcgcga cgagaaacgg gcggcgaacg ctctgcacgg agacagcgaa	26400
aacgagagtc actcgggggt gctggtggag ctcgagggcg acaacgcgcg cctggccgta	26460
ctcaagcgca gcatagaggt caccacttt gcctaccgg cgctcaacct gcccccaag	26520
gtcatgagtg tggcatggg cgagctcatc atgcgccgcg cccagcccct ggccgcggat	26580
gcaaacttgc aagagtcctc cgaggaaggc ctgcccgcgg tcagcgacga gcagctggcg	26640
cgctggctgg agaccgcga cccgcgcgag ctggaggagc ggcgcaagct catgatggcc	26700
gcggtgctgg tcaccgtgga gctcgagtgt ctgcagcgt tcttcgcgga cccgagatg	26760
cagcgcaagc tcgaggagac cctgcactac acctccgcc agggctacgt gcgccaggcc	26820
tgcaagatct ccaacgtgga gctctgcaac ctggtctcct acctgggcat cctgcacgag	26880
aaccgcctcg ggacgaacgt cctgcactcc acctcaaag gggaggcgcg ccgcgactac	26940
atccgcgact gcgcctacct cttcctctgc tacacctggc agacggccat gggggtctgg	27000
cagcagtgcc tggaggagcg caacctcaag gagctggaaa agctcctcaa gcgcaccctc	27060
agggacctct ggacgggctt caacgagcgc tcggtggccg ccgcgctggc ggacatcatc	27120
tttcccgagc gcctgctcaa gaccctgcag cagggcctgc ccgacttcac cagccagagc	27180
atgctgcaga acttcaggac tttcatcctg gagcgctcgg gcatcctgcc ggccacttgc	27240
tgcgcgctgc ccagcgactt cgtgcccac aagtacaggg agtgcccgcc gccgctctgg	27300
ggccactgct acctttcca gctggccaac tacctgcct accactcgga cctcatggaa	27360
gacgtgagcg gcgagggcct gctcgagtgc cactgccgt gcaacctctg cacgccccac	27420

cgctctctag tctgcaaccc gcagctgctc agcgagagtc agattatcgg taccttcgag	27480
ctgcaggggtc cctcgcctga cgagaagtcc gcgggtccag ggctgaaact cactccgggg	27540
ctgtggactt ccgcctacct acgcaaattt gtacctgagg actaccacgc ccacgagatc	27600
aggttctacg aagaccaatc ccgcccgcgc aaggcggagc tcaccgcctg cgtcatcacc	27660
caggggcaca tcctgggcca attgcaagcc atcaacaaag cccgccgaga gttcttgctg	27720
aaaaaggggtc ggggggtgta cctggacccc cagtccggcg aggagctaaa cccgctaccc	27780
ccgccgccgc cccagcagcg ggaccttgct tcccaggatg gcaccagaa agaagcagca	27840
gccgccgccg ccgccgcagc catacatgct tctggaggaa gaggaggagg actgggacag	27900
tcaggcagag gaggtttcgg acgaggagca ggaggagatg atggaagact gggaggagga	27960
cagcagccta gacgaggaag cttcagaggc cgaagaggtg gcagacgaa caccatcgcc	28020
ctcggtcgca gccccctgc cggggcccct gaaatcctcc gaaccagca ccagcgctat	28080
aacctccgct cctccggcg cggcgccacc cgcccgcaga cccaaccgta gatgggacac	28140
cacaggaacc ggggtcggta agtccaagt cccgccgccg ccaccgcagc agcagcagca	28200
gcagcgccag ggctaccgct cgtggcgcg gcacaagaac gccatagtcg cctgcttgca	28260
agactgcggg ggcaacatct ctttcgccc cgccttcctg ctattccacc acggggtcgc	28320
ctttccccgc aatgtcctgc attactaccg tcattctctac agcccctact gcagcggcga	28380
cccagaggcg gcagcggcag ccacagcggc gaccaccacc taggaagata tcctccgcgg	28440
gcaagacagc ggagcagcg gccaggagac ccgcggcagc agcggcggga gcggtgggcg	28500
cactggcct ctcgccaac gaacctct cgaaccggga gctcagacac aggatcttcc	28560
ccactttgta tgccatcttc caacagagca gaggccagga gcaggagctg aaaataaaaa	28620
acagatctct gcgctccctc acccgagct gtctgtatca caaaagcgaa gatcagcttc	28680
ggcgcacgct ggaggacgc gaggcactct tcagcaaata ctgcgcgctc actcttaaag	28740
actagctccg cgcccttctc gaatttaggc gggagaaaac tacgtcatcg ccggccgccg	28800
cccagcccgc ccagccgaga tgagcaaaga gattcccacg ccatacatgt ggagctacca	28860
gccgcagatg ggactcgcgg cgggagcggc ccaggactac tccacccgca tgaactacat	28920
gagcgcggga ccccatga tctcacaggt caacgggatc cgcgccagc gaaaccaa	28980
actgctggaa caggcgcca tcaccgccac gcccgcct aatctcaacc cccgaaattg	29040

gccccgccg	ctcgtgtacc	aggaaacccc	ctccgccacc	accgtactac	ttccgcgtga	29100
cgcccaggcc	gaagtccaga	tgactaactc	aggggcgcag	ctcgcgggcg	gcttttcgtca	29160
cggggcgcgg	ccgctccgac	caggtataag	acacctgatg	atcagaggcc	gaggtatcca	29220
gctcaacgac	gagtcggtga	gctcttcgct	cggtctccgt	ccggacggaa	ctttccagct	29280
cgccggatcc	ggccgctctt	cgttcacgcc	ccgccaggcg	tacctgactc	tgcagacctc	29340
gtcctcggag	ccccgctccg	gcggcatcgg	aaccctccag	ttcgtggagg	agttcgtgcc	29400
ctcgggtctac	ttcaaccctt	tctcgggacc	tcccggacgc	taccccgacc	agttcattcc	29460
gaactttgac	gcggtgaagg	actcggcgga	cggctacgac	tgaatgtcag	gtgtcgaggc	29520
agagcagctt	cgcctgagac	acctcgagca	ctgccgccgc	cacaagtgct	tcgcccgcgg	29580
ttctggtgag	ttctgctact	ttcagctacc	cgaggagcat	accgaggggc	cggcgcacgg	29640
cgtccgcctg	accaccagg	gcgaggttac	ctgttcctc	atccgggagt	ttaccctccg	29700
tcccctgcta	gtggagcggg	agcgggggtcc	ctgtgtccta	actatcgctt	gcaactgccc	29760
taaccctgga	ttacatcaag	atctttgctg	tcattctctgt	gctgagttta	ataaacgctg	29820
agatcagaat	ctactggggc	tcctgtcgcc	atcctgtgaa	cgccaccgtc	ttcaccacc	29880
ccgaccaggc	ccaggcgaac	ctcacctgcg	gtctgcatcg	gagggccaaag	aagtacctca	29940
cctggtactt	caacggcacc	ccctttgtgg	tttacaacag	cttcgacggg	gacggagtct	30000
ccctgaaaga	ccagctctcc	ggtctcagct	actccatcca	caagaacacc	accctccaac	30060
tcttccctcc	ctacctgccg	ggaacctacg	agtgcgtcac	cggccgctgc	accacctca	30120
ccgcctgat	cgtaaaccag	agctttccgg	gaacagataa	ctccctcttc	cccagaacag	30180
gaggtgagct	caggaaactc	cccggggacc	agggcggaga	cgtaccttcg	acccttgtgg	30240
ggttaggatt	ttttattacc	gggttgctgg	ctcttttaat	caaagtttcc	ttgagatttg	30300
ttctttcctt	ctacgtgtat	gaacacctca	acctccaata	actctaccct	ttcttcggaa	30360
tcaggtgact	tctctgaaat	cgggcttggg	gtgctgctta	ctctgttgat	ttttttcctt	30420
atcatactca	gccttctgtg	cctcaggctc	gccgcctgct	gcgcacacat	ctatatctac	30480
tgctggttgc	tcaagtgcag	gggtcgccac	ccaagatgaa	caggtacatg	gtcctatcga	30540
tcctaggcct	gctggccctg	gcggcctgca	gcgccgcaa	aaaagagatt	acctttgagg	30600
agccccgctt	caatgtaact	ttcaagcccc	agggtgacca	atgcaccacc	ctcgtcaa	30660

gcgttaccaa tcatgagagg ctgcgcatcg actacaaaaa caaaactggc cagtttgcgg	30720
tctatagtgt gtttacgccc ggagaccct ctaactactc tgtcaccgtc ttccaggggcg	30780
gacagtctaa gatattcaat tacactttcc ctttttatga gttatgcgat gcggtcatgt	30840
acatgtcaaa acagtacaac ctgtggcctc cctctcccca ggctgtgtg gaaaatactg	30900
ggctttactg ctgtatggct ttcgcaatca ctacgctcg cttaatctgc acggtgctat	30960
acataaaatt caggcagagg cgaatcttta tcgatgaaaa gaaaatgcct tgatcgctaa	31020
caccggcttt ctatctgcag aatgaatgca atcacctccc tactaatcac caccaccctc	31080
cttgcgattg cccatggggtt gacacgaatc gaagtgccag tgggggtcaa tgtcaccatg	31140
gtgggccccg ccggcaattc caccctcatg tgggaaaaat ttgtccgcaa tcaatggggtt	31200
catttctgct ctaaccgaat cagtatcaag cccagagcca tctgcgatgg gcaaaatcta	31260
actctgatca atgtgcaaat gatggatgct gggtactatt acgggcagcg gggagaaatc	31320
attaattact ggcgacccca caaggactac atgctgcatg tagtcgaggc acttcccact	31380
accaccccca ctaccacctc tcccaccacc accaccacta ctactactac tactactact	31440
actactacta ccactaccgc tgcccgccat acccgcaaaa gcaccatgat tagcacaaag	31500
ccccctcgtg ctactccca cgccggcggg cccatcggtg cgacctcaga aaccaccgag	31560
ctttgcttct gccaatgcac taacgccagc gctcatgaac tgttcgacct ggagaatgag	31620
gatgtccagc agagctccgc ttgcctgacc caggaggctg tggagcccgt tgccctgaag	31680
cagatcggtg attcaataat tgactcttct tcttttgcca ctcccgaata ccctcccgat	31740
tctactttcc acatcacggg taccaaagac cctaacctct ctttctacct gatgctgctg	31800
ctctgtatct ctgtggtctc ttccgcgctg atgttactgg ggatgttctg ctgcctgac	31860
tgccgcagaa agagaaaagc tcgctctcag ggccaaccac tgatgccctt cccctacccc	31920
ccggattttg cagataacaa gatatgagct cgctgctgac actaaccgct ttactagcct	31980
gcgctctaac cttgtcgtc tgcgactcga gattccacaa tgtcacagct gtggcaggag	32040
aaaatgttac tttcaactcc acggccgata cccagtggtc gtggagtggc tcaggtagct	32100
acttaactat ctgcaatagc tccacttccc ccggcatatc cccaaccaag taccaatgca	32160
atgccagcct gttcacctc atcaacgctt ccaccctgga caatggactc tatgtaggct	32220
atgtaccctt tgggtgggcaa ggaaagaccc acgcttacia cctggaagtt cgccagccca	32280

gaaccactac ccaagcttct cccaccacca ccaccaccac caccatcacc agcagcagca	32340
gcagcagcag ccacagcagc agcagcagat tattgacttt ggttttggcc agctcatctg	32400
ccgctaccca ggccatctac agctctgtgc ccgaaaccac tcagatccac cgcccagaaa	32460
cgaccaccgc caccacccta cacacctca gcgatcagat gccgaccaac atcacccct	32520
tggctcttca aatgggactt acaagcccca ctccaaaacc agtggatgcg gccgaggtct	32580
ccgccctcgt caatgactgg gcggggctgg gaatgtggtg gttcgccata ggcatgatgg	32640
cgctctgcct gcttctgctc tggctcatct gctgcctcca ccgcaggcga gccagacccc	32700
ccatctatag acccatcatt gtcctgaacc ccgataatga tgggatccat agattggatg	32760
gcctgaaaaa cctacttttt tcttttacag tatgataaat tgagacatgc ctcgcatttt	32820
cttgtacatg ttccttctcc caccttttct ggggtgttct acgctggccg ctgtgtctca	32880
cctggaggta gactgcctct cacccttcac tgtctacctg ctttacggat tggtcaccct	32940
cactctcatc tgcagcctaa tcacagtaat catcgccttc atccagtgcg ttgattacat	33000
ctgtgtgcgc ctcgcatact tcagacacca ccgcagtag cgagacagga acattgccca	33060
acttctaaga ctgctctaata catgcataag actgtgatct gccttctgat cctctgcac	33120
ctgcccaccc tcacctcctg ccagtagacc aaaaatctc cgcgcaaaag acatgcctcc	33180
tgccgcttca cccaactgtg gaatataccc aaatgctaca acgaaaagag cgagctctcc	33240
gaagcttggc tgtatgggggt catctgtgtc ttagttttct gcagcactgt ctttgccctc	33300
ataatctacc cctactttga tttgggatgg aacgcgatcg atgcatgaa ttaccccacc	33360
tttccgcac ccgagataat tccactgcga caagttgtac ccgttgtcgt taatcaacgc	33420
cccccatccc ctacgccac tgaaatcagc tactttaacc taacaggcgg agatgactga	33480
cgccctagat ctagaaatgg acggcatcag taccgagcag cgtctcctag agaggcgcag	33540
gcaggcggct gagcaagagc gcctcaatca ggagctccga gatctcgta acctgcacca	33600
gtgcaaaaga ggcatctttt gtctggtaaa gcaggccaaa gtcacctacg agaagaccgg	33660
caacagccac cgcctcagtt acaaattgcc caccagcgc cagaagctgg tgctcatggt	33720
gggtgagaat cccatcaccg tcaccagca ctcggtagag accgaggggt gtctgcactc	33780
cccctgtcgg ggtccagaag acctctgcac cctggtaaag accctgtgcg gtctcagaga	33840
tttagtcccc tttaactaat caaacactgg aatcaataaa aagaatcact tacttaaaat	33900

cagacagcag gtctctgtcc agttttattca gcagcacctc cttcccctcc tcccaactct	33960
gg tactccaa acgccttctg gcggcaaact tcctccacac cctgaaggga atgtcagatt	34020
cttgctcctg tccctccgca cccactatct tcatgttggt gcagatgaag cgcaccaaaa	34080
cgtctgacga gagcttcaac cccgtgtacc cctatgacac ggaaagcggc cttccctccg	34140
tccctttcct caccctccc ttcgtgtctc ccgatggatt ccaagaaagt cccccgggg	34200
tcctgtctct gaacctggcc gagcccctgg tcacttccca cggcatgctc gccctgaaaa	34260
tgggaagtgg cctctccctg gacgacgtg gcaacctcac ctctcaagat atcaccaccg	34320
ctagccctcc cctcaaaaaa accaagacca acctcagcct agaaacctca tccccctaa	34380
ctgtgagcac ctgaggcgc ctcaccgtag cagccgccgc tcccctggcg gtggccggca	34440
cctccctcac catgcaatca gaggccccc tgacagtaca ggatgcaaaa ctcaccctgg	34500
ccaccaaagg ccccctgacc gtgtctgaag gcaaactggc cttgcaaaca tcggccccgc	34560
tgacggccgc tgacagcagc accctcacag tcagtgccac accaccctt agcacaagca	34620
atggcagctt gggatttgac atgcaagccc ccatttacac caccaatgga aaactaggac	34680
ttaactttgg cgctcccctg catgtggtag acagcctaaa tgcactgact gtagttactg	34740
gccaaggctt tacgataaac ggaacagccc taaaactag agtctcaggt gccctcaact	34800
atgacacatc aggaaaccta gaattgagag ctgcaggggg tatgcgagtt gatgcaaatg	34860
gtcaacttat cttgatgta gcttaccat ttgatgcaca aaacaatctc agccttaggc	34920
ttggacaggg acccctgttt gttaactctg cccacaactt ggatgttaac tacaacagag	34980
gcctctacct gttcacatct ggaaatacca aaaagctaga agttaatatc aaaacagcca	35040
agggtctcat ttatgatgac actgctatag caatcaatgc gggatgatggg ctacagtttg	35100
actcaggctc agatacaaat ccattaaaaa ctaaacttgg attaggactg gattatgact	35160
ccagcagagc cataattgct aaactgggaa ctggcctaag ctttgacaac acaggtgcca	35220
tcacagtagg caacaaaaat gatgacaagc ttaccttggt gaccacacca gacctatccc	35280
ctaactgtag aatctattca gagaaagatg ctaaattcac acttgttttg actaaatgcg	35340
gcagtcaggt gttggccagc gtttctgttt tatctgtaaa aggtagcctt gcgccccatca	35400
gtggcacagt aactagtgtc cagattgtcc tcagatttga tgaaaatgga gttctactaa	35460
gcaattcttc cttgaccct caatactgga actacagaaa aggtgacctt acagagggca	35520

ctgcatatac caacgcagtg ggatttatgc ccaacctcac agcataccca aaaacacaga	35580
gccaaactgc taaaagcaac attgtaagtc aggtttactt gaatggggac aaatccaaac	35640
ccatgaccct caccattacc ctcaatggaa ctaatgaaac aggagatgcc acagtaagca	35700
cttactccat gtcatttctca tggaactgga atggaagtaa ttacattaat gaaacgttcc	35760
aaaccaactc cttcaccttc tcctacatcg cccaagaata aaaagcatga cgctgttgat	35820
ttgattcaat gtgtttctgt tttattttca agcacaacaa aatcattcaa gtcattcttc	35880
catcttagct taatagacac agtagcttaa tagaccagct agtgcaaagc cccattctag	35940
cttataacta gtggagaagt actcgcctac atgggggtag agtcataatc gtgcatcagg	36000
atagggcggt ggtgctgcag cagcgcgcga ataaactgct gccgccgccg ctccgtcctg	36060
caggaataca acatggcagt ggtctcctca gcgatgattc gcaccgcccg cagcataagg	36120
cgccctgtcc tccgggcaca gcagcgcacc ctgatctcac ttaaatacagc acagtaactg	36180
cagcacagca ccacaatatt gttcaaaatc ccacagtgcaggcgctgta tccaaagctc	36240
atggcgggga ccacagaacc cacgtggcca tcataccaca agcgcaggta gattaagtgg	36300
cgacccctca taaacacgct ggacataaac attacctctt ttggcatggt gtaattcacc	36360
acctcccggt accatataaa cctctgatta aacatggcgc catccaccac catcctaac	36420
cagctggcca aaacctgccc gccggctata cactgcaggg aaccgggact ggaacaatga	36480
cagtggagag cccaggactc gtaaccatgg atcatcatgc tcgtcatgat atcaatgttg	36540
gcacaacaca ggcacacgtg catacacttc ctcaggatta caagctcctc ccgcgttaga	36600
accatatccc aggaacaac ccattcctga atcagcgtaa atcccacact gcagggaaga	36660
cctcgcacgt aactcacgtt gtgcattgtc aaagtgttac attcgggcag cagcggatga	36720
tcctccagta tggtagcgcg ggtttctgtc tcaaaaggag gtagacgac cctactgtac	36780
ggagtgcgcc gagacaaccg agatcgtgtt ggtcgtagtgc tcatgcaaaa tggaacgccg	36840
gacgtagtca tatttcctga agtcttagat ctctcaacgc agcaccagca ccaacacttc	36900
gcagtgtaaa aggccaagt cccgagagagt atatatagga ataaaaagt acgtaaacgg	36960
gcaaagtcca aaaaacgccc agaaaaaccg cacgcgaacc tacgccccga aacgaaagcc	37020
aaaaaacact agacactccc ttccggcgct aacttccgct ttcccacgct acgtcacttg	37080
ccccagtcaa acaaaactaca tatcccgaac ttccaagtcg ccacgcccaa aacaccgcct	37140

acacctcccc	gcccgccggc	ccgcccccaa	acccgcctcc	cgccccgcgc	cccgccccgc	37200
gccgcccata	tcattatcat	attggcttca	atccaaaata	aggtatatta	ttgatgatgg	37260
tttaaacgga	tcctctagag	tcgacctgca	ggcatgcaag	cttgagtata	acccccttgc	37320
ggccgcccgg	gccgtcgacc	aattctcatg	tttgacagct	tatcatcgaa	tttctgccat	37380
tcatccgctt	attatcactt	attcaggcgt	agcaaccagg	cgtttaaggg	caccaataac	37440
tgccttaaaa	aaattacgcc	ccgccctgcc	actcatcgca	gtactgttgt	aattcattaa	37500
gcattctgcc	gacatggaag	ccatcacaaa	cggcatgatg	aacctgaatc	gccagcggca	37560
tcagcacctt	gtcgccttgc	gtataatatt	tgcccatggg	gaaaacgggg	gcgaagaagt	37620
tgtccatatt	ggccacgttt	aatcaaaaac	tggtgaaact	caccagggga	ttggctgaga	37680
cgaaaaacat	attctcaata	aaccctttag	ggaaataggc	caggttttca	ccgtaacacg	37740
ccacatcttg	cgaatatatg	tgtagaaact	gccggaaatc	gtcgtgggtat	tcactccaga	37800
gcgatgaaaa	cgtttcagtt	tgctcatgga	aaacggtgta	acaagggtga	acactatccc	37860
atatcaccag	ctcaccgtct	ttcattgcca	tacggaattc	cggatgagca	ttcatcaggc	37920
gggcaagaat	gtgaataaag	gccggataaa	acttgtgctt	atTTTTcttt	acggtcttta	37980
aaaaggccgt	aatatccagc	tgaacggtct	ggttataggt	acattgagca	actgactgaa	38040
atgcctcaaa	atgttcttta	cgatgccatt	gggatatatc	aacggtggta	tatccagtga	38100
TTTTTTctc	catttttagct	tccttagctc	ctgaaaatct	cgataactca	aaaaatacgc	38160
ccggtagtga	tcttatttca	ttatggtgaa	agttggaacc	tcttacgtgc	cgatcaacgt	38220
ctcattttcg	ccaaaagttg	gcccagggct	tcccggatatc	aacagggaca	ccaggattta	38280
tttattctgc	gaagtgatct	tccgtcacag	gtattttattc	gcgataagct	catggagcgg	38340
cgtaaccgtc	gcacaggaag	gacagagaaa	gcgcggatct	gggaagtgac	ggacagaacg	38400
gtcaggacct	ggattgggga	ggcggttgcc	gccgctgctg	ctgacggtgt	gacgttctct	38460
gttccggtca	caccacatac	gttccgcat	tcctatgcga	tgcacatgct	gtatgccggt	38520
ataccgctga	aagttctgca	aagcctgatg	ggacataagt	ccatcagttc	aacggaagtc	38580
tacacgaagg	TTTTTgcgct	ggatgtggct	gcccggcacc	gggtgcagtt	tgcatgccg	38640
gagtctgatg	cggttgcgat	gctgaaacaa	ttatcctgag	aataaatgcc	ttggccttta	38700
tatggaaatg	tggaactgag	tggatatgct	gtttttgtct	gttaaacaga	gaagctggct	38760

gttatccact gagaagcgaa cgaaacagtc gggaaaatct cccattatcg tagagatccg	38820
cattattaat ctcaggagcc tgtgtagcgt ttataggaag tagtgttctg tcatgatgcc	38880
tgcaagcggg aacgaaaacg atttgaatat gccttcagga acaatagaaa tcttcgtgcg	38940
gtgttacgtt gaagtggagc ggattatgtc agcaatggac agaacaacct aatgaacaca	39000
gaaccatgat gtggtctgtc cttttacagc cagtagtgct cgccgcagtc gagcgacagg	39060
gcgaagccct cgagtgaagc aggaagcacc aggggaacagc acttatatat tctgcttaca	39120
cacgatgcct gaaaaaactt cccttggggg tatccactta tccacgggga tatttttata	39180
attatttttt ttatagtttt tagatcttct tttttagagc gccttgtagg cttttatcca	39240
tgctggttct agagaagggt ttgtgacaaa ttgccctttc agtgtgacaa atcacccctca	39300
aatgacagtc ctgtctgtga caaattgccc ttaaccctgt gacaaattgc cctcagaaga	39360
agctgttttt tcacaaagtt atccctgctt attgactctt ttttatttag tgtgacaatc	39420
taaaaacttg tcacacttca catggatctg tcatggcgga aacagcggtt atcaatcaca	39480
agaaacgtaa aaatagcccc cgaatcgctc agtcaaacga cctcactgag gcggcatata	39540
gtctctcccc ggatcaaaaa cgtatgctgt atctgttcgt tgaccagatc agaaaatctg	39600
atggcacccct acaggaacat gacggatatc gcgagatcca tgttgctaaa tatgctgaaa	39660
tattcggatt gacctctgcg gaagccagta aggatatacg gcaggcattg aagagtttcg	39720
cggggaagga agtggttttt tatcgccctg aagaggatgc cggcgatgaa aaaggctatg	39780
aatcttttcc ttggtttatc aaacgtgcgc acagtccatc cagagggctt tacagtgtac	39840
atatcaacc atacttcatt cccttcttta tcgggttaca gaaccggttt acgcagtttc	39900
ggcttagtga aacaaaagaa atcaccaatc cgtatgcat gcgtttatac gaatccctgt	39960
gtcagtatcg taagccggat ggctcaggca tcgtctctct gaaaatcgac tggatcatag	40020
agcgttacca gctgcctcaa agttaccagc gtatgcctga cttccgccgc cgcttcctgc	40080
aggctctgtg taatgagatc aacagcagaa ctccaatgcg cctctcatac attgagaaaa	40140
agaaaggccg ccagacgact catatcgat tttccttccg cgatatcact tccatgacga	40200
caggatagtc tgagggttat ctgtcacaga tttgagggtg gttcgtcaca tttgttctga	40260
cctactgagg gtaatttgtc acagttttgc tgtttccttc agcctgcatg gattttctca	40320
tactttttga actgtaattt ttaaggaagc caaatttgag ggcagtttgt cacagttgat	40380

ttccttctct	ttcccttcgt	catgtgacct	gatatcgggg	gtagttcgt	catcattgat	40440
gagggttgat	tatcacagtt	tattactctg	aattggctat	ccgcgtgtgt	acctctacct	40500
ggagtttttc	ccacggtgga	tatttcttct	tgcgctgagc	gtaagagcta	tctgacagaa	40560
cagttcttct	ttgcttcctc	gccagttcgc	tcgctatgct	cggttacacg	gctgcggcga	40620
gcgctagtga	taataagtga	ctgaggtatg	tgctcttctt	atctcctttt	gtagtgttgc	40680
tcttatttta	aacaactttg	cggttttttg	atgactttgc	gattttgttg	ttgctttgca	40740
gtaaattgca	agatttaata	aaaaaacgca	aagcaatgat	taaaggatgt	tcagaatgaa	40800
actcatggaa	acacttaacc	agtgcataaa	cgctggtcac	gaaatgacga	aggctatcgc	40860
cattgcacag	tttaatgatg	acagcccgga	agcgaggaaa	ataaccgggc	gctggagaat	40920
aggtgaagca	gcggatttag	ttggggtttc	ttctcaggct	atcagagatg	ccgagaaagc	40980
agggcgacta	ccgcacccgg	atatggaaat	tcgaggacgg	gttgagcaac	gtgttggtta	41040
tacaattgaa	caaattaatc	atatgcgtga	tgtgtttggt	acgcgattgc	gacgtgctga	41100
agacgtatth	ccaccggtga	tcgggggttc	tgcccataaa	ggtggcgtht	acaaaacctc	41160
agtttctgtt	catcttgctc	aggatctggc	tctgaagggg	ctacgtgtth	tgctcgtgga	41220
aggtaacgac	ccccaggga	cagcctcaat	gtatcacgga	tgggtaccag	atcttcatat	41280
tcatgcagaa	gacactctcc	tgcccttcta	tcttggggaa	aaggacgatg	tcacttatgc	41340
aataaagccc	acttgctggc	cggggcttga	cattattcct	tcctgtctgg	ctctgcaccg	41400
tattgaaact	gagttaatgg	gcaaatttga	tgaaggtaaa	ctgccaccg	atccacacct	41460
gatgctccga	ctggccattg	aaactgttgc	tcatgactat	gatgtcatag	ttattgacag	41520
cgcgcctaac	ctgggtatcg	gcacgattaa	tgctgtatgt	gctgctgatg	tgctgattgt	41580
tcccacgcct	gctgagttgt	ttgactacac	ctccgcactg	cagtttttcg	atatgcttcg	41640
tgatctgctc	aagaacgttg	atcttaaagg	gttcgagcct	gatgtacgta	ttttgcttac	41700
caaatacagc	aatagtaatg	gctctcagtc	cccgtggatg	gaggagcaaa	ttcgggatgc	41760
ctggggaagc	atggttctaa	aaaatgttgt	acgtgaaacg	gatgaagttg	gtaaagggtca	41820
gatccggatg	agaactgtth	ttgaacaggc	cattgatcaa	cgctcttcaa	ctgggtgcctg	41880
gagaaatgct	ctttctatth	gggaacctgt	ctgcaatgaa	atthtcgatc	gtctgattaa	41940
accacgctgg	gagattgat	aatgaagcgt	gcgcctgtta	ttccaaaaca	tacgtcaat	42000

actcaaccgg ttgaagatac ttcgttatcg acaccagctg ccccgatggg ggattcgtta	42060
attgcgcgcg taggagtaat ggctcgcggg aatgccatta ctttgcctgt atgtggtcgg	42120
gatgtgaagt ttactcttga agtgctccgg ggtgatagtg ttgagaagac ctctcgggta	42180
tggtcaggta atgaacgtga ccaggagctg cttactgagg acgcactgga tgatctcatc	42240
ccttcttttc tactgactgg tcaacagaca ccggcgttcg gtcgaagagt atctgggtgc	42300
atagaaattg ccgatgggag tcgccgtcgt aaagctgctg cacttaccga aagtgattat	42360
cgtgttctgg ttggcgagct ggatgatgag cagatggctg cattatccag attgggtaac	42420
gattatcgcc caacaagtgc ttatgaacgt ggtcagcggt atgcaagccg attgcagaat	42480
gaatttgctg gaaatatttc tgcgctggct gatgcggaaa atatttcacg taagattatt	42540
acccgctgta tcaacaccgc caaattgcct aaatcagttg ttgctctttt ttctcacccc	42600
ggatgaactat ctgcccggtc aggtgatgca cttcaaaaag cctttacaga taaagaggaa	42660
ttacttaagc agcaggcatc taaccttcac gagcagaaaa aagctggggg gatatttgaa	42720
gctgaagaag ttatcactct ttttaacttct gtgcttaaaa cgatcatctgc atcaagaact	42780
agtttaagct cacgacatca gtttgctcct ggagcgacag tattgtataa gggcgataaa	42840
atggtgctta acctggacag gtctcgtgtt ccaactgagt gtatagagaa aattgaggcc	42900
attcttaagg aacttgaaaa gccagcaccg tgatgcgacc acgttttagt ctacgtttat	42960
ctgtctttac ttaatgtcct ttgttacagg ccagaaagca taactggcct gaatattctc	43020
tctgggcca ctgttccact tgtatcgtcg gtctgataat cagactggga ccacgggtccc	43080
actcgtatcg tcggctgat tattagtctg ggaccacggg cccactcgta tcgtcggctc	43140
gattattagt ctgggaccac ggtcccactc gtatcgtcgg tctgataatc agactgggac	43200
cacgggtcca ctcgtatcgt cggctctgatt attagtctgg gaccatgggc cactcgtat	43260
cgctcggctg attattagtc tgggaccacg gtcccactcg tatcgtcggg ctgattatta	43320
gtctggaacc acgggtccac tcgtatcgtc ggtctgatta ttagtctggg accacgggtc	43380
cactcgtatc gtcggcttga ttattagtct gggaccacga tcccactcgt gttgtcggtc	43440
tgattatcgg tctgggacca cgggtcccact tgtattgtcg atcagactat cagcgtgaga	43500
ctacgattcc atcaatgcct gtcaagggca agtattgaca tgtcgtcgta acctgtagaa	43560
cggagtaacc tcgggtgtcg gttgtatgcc tgctgtggat tgctgctgtg tcctgcttat	43620

ccacaacatt ttgcgcacgg ttatgtggac aaaatacctg gttaccagg ccgtgccggc	43680
acgctcggta cccggggatc ctcgtttaaa c	43711

<210> 53
 <211> 41545
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<220>
 <221> modified_base
 <222> (16144)..(16144)
 <223> a, c, t, g, unknown or other

<400> 53	
catcatcaat aatatacctt attttggatt gaagccaata tgataatgag atgggcggcg	60
cggggcgggg cgcgggcggg gaggcgggtt tggggcgggg ccggcgggcg gggcgggtgtg	120
gcggaagtgg actttgtaag tgtggcggat gtgacttgct agtgccgggc gcggtaaaag	180
tgacgttttc cgtgcgcgac aacgccccg ggaagtgaca tttttccgc ggtttttacc	240
ggatgttgta gtgaatttgg gcgtaaccaa gtaagatttg gccattttcg cgggaaaact	300
gaaacgggga agtgaaatct gattaatttt gcgttagtca taccgcgtaa tatttgtcta	360
gggccgaggg actttggccg attacgtgga ggactcgccc aggtgttttt tgaggtgaat	420
ttccgcgttc cgggtcaaag tctgcgtttt attattatag gatatcccat tgcatacgtt	480
gtatccatat cataatatgt acatttatat tggctcatgt ccaacattac cgccatgttg	540
acattgatta ttgactagtt attaatagta atcaattacg gggtcattag ttcatagccc	600
atatatggag ttccgcgtta cataacttac ggtaaattggc ccgcctggct gaccgcccaa	660
cgacccccgc ccattgacgt caataatgac gtatgttccc atagtaacgc caatagggac	720
tttcattga cgtcaatggg tggagtattt acggtaaact gccacttgg cagtacatca	780
agtgtatcat atgccaagta cgccccctat tgacgtcaat gacggtaaatt ggcccgctg	840
gcattatgcc cagtacatga ctttatggga ctttcctact tggcagtaca tctacgtatt	900
agtcacgct attaccatgg tgatgcggtt ttggcagtac atcaatgggc gtggatagcg	960

gtttgactca cggggatttc caagtctcca cccattgac gtcaatggga gtttgttttg	1020
gcacaaaaat caacgggact ttccaaaatg tcgtaacaac tccgccccat tgacgcaaat	1080
gggcggtagg cgtgtacggt gggaggtcta tataagcaga gctctcccta tcagtgatag	1140
agatctccct atcagtgata gagatcgtcg acgagctcgt ttagtgaacc gtcagatcgc	1200
ctggagacgc catccacgct gttttgacct ccatagaaga caccgggacc gatccagcct	1260
ccgcggccgg gaacggtgca ttggaacgcg gattccccgt gccaaagagt agatcttccg	1320
tttatctagg taccagatat cgccaccatg tccgaggact ttctgattct gatcgccatc	1380
ctggtgatcg tgattctcgt gggcacaatc acaaccctgg tgggcgccat cggcggcatt	1440
agggccagga ggagcttcct cttcatttgc atcttcttcc tgttcctctc cctcttcctg	1500
acaatcctcg ccctgctgct gggcttcagc tggctcctgc tgggtggccat cctgttctgg	1560
gtgctctggc tggatcatcct cattctgctg ctgctggtgt accctattcc tcaccacccc	1620
ctgcccacct ccctcaggtt tagaatgaag cagagggtga gcagcgaccc cacaggttct	1680
gacagaagcc ctcagggcag ccataatagc ctgaactccc ccgatgagga ggaccccaag	1740
gatgacacca agcaacctct gtgcaacatg acccagggcg gacctcccgt caatggacag	1800
ctcctcggac aacatgctca atgccccct cactatccct gctgccatat tcagcatccc	1860
gacggagagg attccgatgg agacgatggc aagtcctggg gcgatgccgg agaggaagac	1920
aatggcccta acgaccctaa caccgccagc accagagagt ccatttacga ggacctcaga	1980
tacccccaaa gggacgcaa tggcgagtat gagaacgtgg gatacccccc tagggacgga	2040
gatgcccctc ataggctcgg agagcctgtg tatgacgatg tggagcaagc caccgctaac	2100
gaggtgagaa tctccccctc gttcagactg ccctacggaa gcgctttcgg acctggcccc	2160
cagcctggac ccattctgga gagctccaca tggggctttc tggctttcac acagacctcc	2220
ctgttcgccg acgacattgc cgacgtatt agggactact gcacaacca ccctggcccc	2280
acaaggaaca cccaggtggt cctcatgaac ttcgagggca gcggagtgcc cctgcctatg	2340
ttttttcccc ctggagagga gacagaagag cagagagagg gcgatagagc tagcgactcc	2400
gacgagtccg aagacgctca gatcctgacc gtgttctgcc tgttttgcca gtggacactc	2460
tttatctgcc tgggaatcag gatgatctgt aactggaggg gcaaactcac caggatcatc	2520
tgcctgaagt tctgcctcta cggactgatt tccgcctccc tgtccttcgg ctggtacgct	2580

tttctgaagg aagtgaccct ccccaccaca gccaccgttg atcctaggca actccccctg	2640
ttcctcttca tcctgagctc cgtgctgggtg attctcgcca tcatgatgga gtttcaaaca	2700
tcctccagcc tcttcgctgc tctgttcgtg attatcgccg gaatgctgtg cgtcacagtg	2760
ggcgtgattt ttctgctggc tggcgtcaag cctctcctga gcggcatgat ctgcgcctcc	2820
ggcatcacia tgctcgtgct cggcgtcgtg ctgctgggtg tgtgcaccag agatgagcac	2880
gctattttccg ccagccacca tgctagcgat ggctccgtga atcagcagaa ggaaaatcag	2940
ccccagacc tggaggaatg caagacagat caggagagga agaggtacag gaacaggctg	3000
gcctccagga ggtgtagagc taagttcagg aaccagctgg aacatttttag gacagtcgcc	3060
gctgctaaga cagaggagaa caacaggctc aggggtgctca tcaggcagat gtgtcctaca	3120
ctggacgtgg aatccatcgt cccctccacc tccgccggct accacgagcc tctgaatcac	3180
ctgaccaca gccccagccc ttgtcatcac agggatgaac cccctccag aagccccagc	3240
cctcaaccca ccgtctccga gcagtcccag cagtccccca ggacgagag ccctcaaggc	3300
acatcccagg gttctacaag acctcaggtg cctggaggcg ccaccaccag aaaaagaggc	3360
ggcgtgagag gccaacctgc caagtgtcac ggcaagtaca ccacaaccgc cgagggactg	3420
accgctctcc tgaataggag gcacagcccc aggacatcca acgagggcag gtggatgaat	3480
ggagtcatgg ctgtgaacct ctccaaatgg cccctgtaca gcctgaggag agccctggcc	3540
ctcgccatgg ctctagaag gaggctctcc ggccctccct ggctgacagt gctgctgctg	3600
ctgtccacac tgagcgtggc cgccctgctg attctcttcc tgattttcag cgccggcgcc	3660
accattagca cagaagccag cctgctggtc ctgctcctgc tgtttgtgac cctgctgctg	3720
cctctcctgt cctccaacgg actccagctc cctgccgccc tgattctgat ccagtgtttc	3780
ctcctggccg ctgattatct cgcctacctg attctgccta ccattatgcc caggggcaga	3840
agcacaggaa ggaagggcag ggacacagag aaagagagga gcagatcccc tctcagagct	3900
cctggcggtt ctgatggacc cagcacaagg gctggctgtg gagccggacc ctgtcagctg	3960
agcagcccca tcgccggaac caacggcaat gaaggcggcg agggcgacga ctacaagagc	4020
tggaggaagc ccgaggaaga ggacaacggc cccaatgacc ccaataccaa caacaggatt	4080
gaggatggag acggcgacga cggaaaatcc tggaggaatc ctgaggagga ggataacaga	4140
aagcaggaca ggctgggcac caagcctttc atggacctcg acggaaccgg cggaggcgag	4200

ggctacagcc agatgggtccc tatcgccacc gcccccgaa gcggccacgc cgctacctat	4260
caggatctcc aggccgcccc ttacatcatc tggcctctcc agaccgattg ccagcctgtg	4320
gctaccacct tcgcctcccc cggacagatc cagtgggtata caagcgccgt ccccagccc	4380
acagagcatt gctcccagtt taaaaacgct cccaccgtca accagcagca gcctattagc	4440
caacccccagc ccgaaaatcc ccctgctttc acctttaccc agcccgcttc catcattccc	4500
ggcgtcatta gcgcctccaa cctgaacgtg agcgcttccc ctatcatccc tagcgaccat	4560
gtcctcccca tcattacctc cgtgaccagc ctcgcccaac ctaataacat ggccggccac	4620
tggtatgaga gcgtgattcc cggcctgttc ctctgcccc tgatcctccc ttccctgttc	4680
tggatttgct ccctgctgac cttcctgggtg ggccacggag ccaatattgt gagcgccgtc	4740
ctgttcctcg tgctggcttg gtgtctctc attgccaact ggaacgtgac aagagaggac	4800
ttcgtgtccg gcaggagaag ctccatgagc agcctgtccg tggccgcttc caccgccaca	4860
gccatgttcg ccagcttcct caccctgagc tttgatggcc tgggcctgct gctgtttggc	4920
accgccctgg tgatccagac aatttacgtg ctgtatctgg tggatcatgga gatcacctg	4980
tggatcatga tgtttaggta tctccacttt tggatcacc tgctgttcct gctgagcccc	5040
attattctct ccgtcgcctg tctcatcatc caatcctccg ccctgctgat cgaggctgtg	5100
gtcgtcacca ccatcacagt cctggccatt tttctgtggc tccctcctca aggcgctgag	5160
gccgatctcg gcaccgccct gctgattctg aataccgcc tgtgcctggg cgtgctgac	5220
ctgaccgcta tccctacatg atgatgagcg gccgcgatct gctgtgcctt ctagttgcca	5280
gccatctgtt gtttgccct cccccgtgcc ttccttgacc ctggaaggtg cactccac	5340
tgtcctttcc taataaaatg aggaaattgc atcgcatgtg ctgagtaggt gtcattctat	5400
tctgggggggt ggggtggggc aggacagcaa gggggaggat tgggaagaca atagcaggca	5460
tgctggggat gcggtgggct ctatggccga tcagcgatcg ctgaggtggg tgagtgggcg	5520
tggcctgggg tggtcatgaa aatatataag ttgggggtct tagggctctt ttatttgtgt	5580
tgagagacc gccggagcca tgagcgggag cagcagcagc agcagtagca gcagcgcctt	5640
ggatggcagc atcgtgagcc cttatttgac gacgcggatg cccactggg ccgggggtgcg	5700
tcagaatgtg atgggctcca gcatcgacgg ccgaccgctc ctgcccga attccgccac	5760
gctgacctat gcgaccgtcg cggggacgcc gttggacgcc accgccgcg ccgccgccac	5820

cgagccgcc	tcggccgtgc	gcagcctggc	cacggacttt	gcattcctgg	gaccactggc	5880
gacaggggct	acttctcggg	ccgctgctgc	cgccgttcgc	gatgacaagc	tgaccgcctt	5940
gctggcgag	ttggatgcgc	ttactcggga	actgggtgac	ctttctcagc	aggatcatggc	6000
cctgcgccag	caggtctcct	ccctgcaagc	tggcgggaat	gcttctccca	caaatgccgt	6060
ttaagataaa	taaaaccaga	ctctgttttg	attaaagaaa	agtagcaagt	gcattgctct	6120
ctttatttca	taattttccg	cgcgcatag	gccctagacc	agcgttctcg	gtcgttgagg	6180
gtgcggtgta	tcttctccag	gacgtggtag	aggtaggtct	ggacgttgag	atacatgggc	6240
atgagcccgt	cccgggggtg	gaggtagcac	cactgcagag	cttcatgctc	cggggtggtg	6300
ttgtagatga	tccagtcgta	gcaggagcgc	tgggcatggt	gcctaaaaat	gtccttcagc	6360
agcaggccga	tggccagggg	gaggcccttg	gtgtaagtgt	ttacaaaacg	gttaagttag	6420
gaagggtgca	ttcggggaga	gatgatgtgc	atcttgact	gtatttttag	attggcgatg	6480
ttccgccca	gatcccttct	gggattcatg	ttgtgcagga	ccaccagtac	agtgtatccg	6540
gtgcacttgg	ggaatttgtc	atgcagctta	gagggaaaag	cgtggaagaa	cttgagacg	6600
cctttgtggc	ctcccagatt	ttcatgcat	tcgtccatga	tgatggcaat	gggcccgcgg	6660
gaggcagctt	gggcaaagat	atttctgggg	tcgctgacgt	cgtagtgttg	ttccagggtg	6720
aggctgtcat	aggccatttt	tacaaagcgc	gggcggaggg	tgcccactg	ggggatgatg	6780
gtcccctctg	gccctggggc	gtagttgccc	tcgcagatct	gcatttccca	ggccttaatc	6840
tcggaggggg	gaatcatatc	cacctgcggg	gcgatgaaga	aaacggtttc	cggagccggg	6900
gagattaact	gggatgagag	caggtttcta	agcagctgtg	attttccaca	accggtgggc	6960
ccataaataa	cacctataac	cggttgcagc	tggtagttaa	gagagctgca	gctgccgtcg	7020
tcccggagga	ggggggccac	ctcgttgagc	atgtccctga	cgcgcatgtt	ctccccgacc	7080
agatccgcca	gaaggcgctc	gccgcccagg	gacagcagct	cttgcaagga	agcaaagttt	7140
ttcagcggct	tgaggccgtc	cgccgtgggc	atgtttttca	gggtctggct	cagcagctcc	7200
aggcgggtccc	agagctcggg	gacgtgctct	acggcatctc	tatccagcat	atctcctcgt	7260
ttcgcggggt	ggggcgactt	tcgctgtagg	gcaccaagcg	gtggctgtcc	agcggggcca	7320
gagtcatgtc	cttccatggg	cgcagggtcc	tcgtcagggt	gggtctgggtc	acggtgaagg	7380
ggtgcgctcc	gggctgagcg	cttgccaagg	tcgccttgag	gctggttctg	ctggtgctga	7440

agcgctgccg gtcttcgccc tgcgcgtcgg ccaggtagca tttgaccatg gtgtcatagt	7500
ccagcccctc cgcgggcgtgt cccttggcgc gcagcttgcc cttggaggtg gcgccgcacg	7560
aggggcagag caggctcttg agcgcgtaga gcttgggggc gaggaagacc gattcggggg	7620
agtaggcgtc cgcgccgcag accccgcaca cggctctgca ctccaccagc caggtgagct	7680
cggggcgcg cgggtcaaaa accaggtttc ccccatgctt tttgatgcgt ttcttacctc	7740
gggtctccat gaggtggtgt ccccgctcgg tgacgaagag gctgtccgtg tctccgtaga	7800
ccgacttgag gggctctttc tccagggggg tccctcggtc ttctcgtag aggaactcgg	7860
accactctga gacgaaggcc cgcgctccagg ccaggacgaa ggaggctatg tgggaggggt	7920
agcggtcgtt gtccactagg ggggtccacct tctccaaggt gtgaagacac atgtcgcctt	7980
cctcggcgtc caggaaggtg attggcttgt aggtgtaggc cacgtgaccg ggggttcctg	8040
acgggggggt ataaaagggg gtgggggcgc gctcgtcgtc actctcttcc gcatcgtgt	8100
ctgcgagggc cagctgctgg ggtgagtatt ccctctcgaa ggcgggcatg acctccgcgc	8160
tgaggttgtc agtttccaaa aacgaggagg atttgatgtt cacctgtccc gaggtgatac	8220
ctttgaggggt acccgctcc atctggtcag aaaacacgat ctttttattg tccagcttgg	8280
tggcgaacga cccgtagagg gcgttggaga gcagcttggc gatggagcgc agggctctggt	8340
tcttgtccct gtcggcgcg tccttggccg cgatgttgag ctgcacgtac tcgcgcgcga	8400
cgcagcgcca ctcggggaag acggtggtgc gctcgtcggg caccaggcgc acgcgccagc	8460
cgcggttgtg cagggtgacc aggtccacgc tgggtggcgac ctcgccgcgc aggcgctcgt	8520
tgggtccagca gagacggccg cccttgcgcg agcagaaggg gggcaggggg tcgagctggg	8580
tctcgtccgg ggggtccgcg tccacggtga aaaccccggg gcgcaggcgc gcgtcgaagt	8640
agtctatctt gcaaccttgc atgtccagcg cctgctgcca gtcgcgggcg gcgagcgcgc	8700
gctcgtaggg gttgagcggc gggccccagg gcatgggggtg ggtgagtgcg gaggcgtaca	8760
tgccgcagat gtcatagacg tagaggggct cccgcaggac cccgatgtag gtggggtagc	8820
agcggccgcc gcggatgctg gcgcgcacgt agtcatacag ctctgtcgag ggggcgagga	8880
ggtcggggcc caggttggtg cgggcggggc gctccgcgcg gaagacgatc tgcctgaaga	8940
tggcatgcga gttggaagag atggtggggc gctggaagac gttgaagctg gcgtcctgca	9000
ggccgacggc gtcgcgcacg aaggaggcgt aggagtcgcg cagcttgtgt accagctcgg	9060

cggtgacctg cacgtcgagc ggcagtagt cgagggtctc gcgatgatg tcatatttag	9120
cctgccccctt ctttttccac agctcgcggt tgaggacaaa ctcttcgcgg tctttccagt	9180
actcttggtat cgggaaaccg tccggttccg aacggtaaga gcctagcatg tagaactggt	9240
tgacggcctg gtaggcgcag cagcccttct ccacggggag ggcgtaggcc tgcgcggcct	9300
tgcggagcga ggtgtgggtc agggcgaagg tgtccctgac catgactttg aggtactggt	9360
gcttgaagtc ggagtcgtcg cagccgcccc gctcccagag cgagaagtcg gtgcgcttct	9420
tggagcgggg gttgggcaga gcgaagggtga catcgttgaa gaggattttg cccgcgcggg	9480
gcatgaagtt gcgggtgatg cggaagggcc ccggcacttc agagcggttg ttgatgacct	9540
gggcggcgag cacgatctcg tcgaagccgt tgatgtttgt gcccacgatg tagagttcca	9600
ggaagcgggg ccggcccttt acggtgggca gcttctttag ctcttcgtag gtgagctcct	9660
cgggcgaggc gaggccgtgc tcggccaggg ccagtcgcg gaggtgcggg ttgtctctga	9720
ggaaggactt ccagaggtcg cgggccagga gggctctgag gcggtctctg aaggtcctga	9780
actggcggcc cacggccatt ttttcggggg tgatgcagta gaaggtgagg gggctttgct	9840
gccagcggtc ccagtcgagc tgcagggcga ggtcgcgcgc gcggtgacc aggcgctcgt	9900
cgccccgaa tttcatgacc agcatgaagg gcacgagctg ctttcgaag gccccatcc	9960
aagtgtaggt ctctacatcg taggtgacaa agaggcgctc cgtgcgagga tgcgagccga	10020
tcgggaagaa ctggatctcc cgccaccagt tggaggagtg gctgttgatg tgggtggaagt	10080
agaagtcccg tcgccgggcc gaacactcgt gctggctttt gtaaaagcga gcgcagtact	10140
ggcagcgtg cacgggctgt acctcatgca cgagatgcac ctttcgcccg cgcacgagga	10200
agccgagggg aaatctgagc cccccgcctg gctcgcggca tggctggttc tcttctactt	10260
tggatgcgtg tccgtctccg tctggctcct cgagggtgtg tacggtggag cggaccacca	10320
cgccgcgcga gccgcaggtc cagatatcgg cgcgcggcgg tcggagtttg atgacgacat	10380
cgcgcagctg ggagctgtcc atggtctgga gctcccgcgg cggcggcagg tcagccggga	10440
gttcttgag gttcacctcg cagagtcggg ccagggcgcg gggcaggctt aggtggtacc	10500
tgatctctag gggcgtgttg gtggcggcgt cgatggcttg caggagcccg cagccccggg	10560
gggcgacgac ggtgccccgc ggggtggtgg tggtggtggc ggtgcagctc agaagcggtg	10620
ccgcgggcgg gccccggag gtaggggggg ctccggtccc gcgggcaggg gcggcagcgg	10680

cacgtcggcg tggagcgcg gcaggagttg gtgctgtgcc cggaggttgc tggcgaaggc	10740
gacgacgcgg cggttgatct cctggatctg gcgcctctgc gtgaagacga cgggcccgg	10800
gagcttgaac ctgaaagaga gttcgacaga atcaatctcg gtgtcattga ccgcggcctg	10860
gcgcaggatc tcctgcacgt ctcccagatt gtcttggtag gcgatctcgg ccatgaactg	10920
ctcgatctct tcctcctgga ggtctccgcg tccggcgcg tccacggtgg ccgccaggtc	10980
gttggagatg cgccccatga gctgcgagaa ggcgttgagt ccgccctcgt tccagactcg	11040
gctgtagacc acgccccct ggtcatcgcg ggcgcgcg accacctgcg cgaggttgag	11100
ctccacgtgc cgcgcaaga cggcgtagtt gcgcagacgc tggaagaggt agttgagggt	11160
ggtggcggtg tgctcgcca cgaagaagtt catgaccag cggcgcaacg tggattcgtt	11220
gatgtcccc aaggcctcca gccgttccat ggcctcgtag aagtccacgg cgaagttgaa	11280
aaactgggag ttgcgcgccg acacggtcaa ctctcctcc agaagacgga tgagctcggc	11340
gacggtgtcg cgcacctcg gctcgaaggc tatggggatc tcttcctccg ctagcatcac	11400
cacctcctcc tcttcctct cttctggcac ttccatgatg gcttcctcct cttcgggggg	11460
tggcggcgcg ggcggtgggg gagggggcg tctgcgccgg cggcgcgca ccgggaggcg	11520
gtccacgaag cgcgcatca tctccccgcg gcggcgcg atggtctcgg tgacggcgcg	11580
gccgttctcc cggggcgca gttggaagac gccgccggac atctggtgct ggggcgggtg	11640
gccgtgaggc agcgagacgg cgctgacgat gcatctcaac aattgctgcg taggtacgcc	11700
gccgagggac ctgagggagt ccatatccac cggatccgaa aacctttcga ggaaggcg	11760
taaccagtcg cagtcgaag gtaggctgag caccgtggcg ggcggcgggg ggtgggggga	11820
gtgtctggcg gaggtgctgc tgatgatgta attgaagtag gcggacttga cacggcggat	11880
ggtcgacagg agcaccatgt ccttgggtcc ggcctgctgg atgcggaggc ggtcggctat	11940
gccccaggct tcgttctggc atcggcgag gtcctttag tagtcttgca tgagcctttc	12000
caccggcacc tcttctcctt cctcttctgc ttcttccatg tctgcttcgg ccctggggcg	12060
gcgccgcgcc cccctgcccc ccatgcgcgt gacccgaac cccctgagcg gttggagcag	12120
ggccaggctg gcgacgacgc gctcggccag gatggcctgc tgcacctgcg tgagggtggt	12180
ttggaagtca tccaagtcca cgaagcggtg gtaggcgcc gtgttgatgg tgtaggtgca	12240
gttggccatg acggaccagt tgacggtctg gtggcccgt tgcgacatct cggtgtacct	12300

gagtcgag taggcgcggg agtcgaagac gtagtcgttg caagtccgca ccaggtactg	12360
gtagcccacc aggaagtgcg gcggcggctg gcggtagagg ggccagcgca ggggtggcggg	12420
ggctccgggg gccaggtctt ccagcatgag gcggtggtag gcgtagatgt acctggacat	12480
ccaggtgata cccgcggcgg tgggtggaggc gcgcgggaag tcgcgcaccc gggtccagat	12540
gttgcgagg ggcagaaagt gtcctatggt aggcgtgctc tgtccagtca gacgcgcgca	12600
gtcgttgata ctctagacca gggaaaacga aagccggtca gcgggcactc ttccgtggtc	12660
tggtagaatg atcgcaaggg tatcatggcg gagggcctcg gttcgagccc cgggtccggg	12720
ccggacggtc cgccatgatc cacgcggtta ccgccgcgt gtcgaacca ggtgtgcgac	12780
gtcagacaac ggtggagtgt tccttttggc gtttttctgg ccgggcgcgc gcgccgcgta	12840
agagactaag ccgcgaaagc gaaagcagta agtggctcgc tccccgtagc cggagggatc	12900
cttgctaagg gttgcgttgc ggcgaacccc ggttcgaatc ccgtactcgg gccggccgga	12960
cccgcggcta aggtgttgga ttggcctccc cctcgtataa agaccccgct tgcggattga	13020
ctccggacac ggggacgagc cccttttatt tttgctttcc ccagatgcat ccggtgctgc	13080
ggcagatgcg ccccccgcgc cagcagcagc aacaacacca gcaagagcgg cagcaacagc	13140
agcgggagtc atgcagggcc ccctcaccca ccctcggcgg gccggccacc tcggcgtccg	13200
cggccgtgtc tggcgcctgc ggcggcggcg gggggccggc tgacgacccc gaggagcccc	13260
cgcggcgcag ggccagacac tacctggacc tggaggaggg cgagggcctg gcgcggctgg	13320
gggcgccgtc tcccgagcgc caccgcggg tgcagctgaa gcgcgactcg cgcgaggcgt	13380
acgtgcctcg gcagaacctg ttcagggacc gcgcgggcga ggagcccag gagatgcggg	13440
acaggagggt cagcgcaggg cgggagctgc ggcaggggct gaaccgcgag cggctgctgc	13500
gcgaggagga ctttgagccc gacgcgcgga cggggatcag cccgcgcgc gcgcacgtgg	13560
cggccgccga cctggtgacg gcgtacgagc agacggtgaa ccaggagatc aacttccaaa	13620
agagtttcaa caaccacgtg cgcacgctgg tggcgcgcga ggaggtgacc atcgggctga	13680
tgcacctgtg ggactttgta agcgcgctgg tgcagaacct caacagcaag cctctgacgg	13740
cgcagctgtt cctgatagt cagcacagca gggacaacga ggcgtttagg gacgcgctgc	13800
tgaacatcac cgagcccag ggtcggtagc tgctggacct gattaacatc ctgcagagca	13860
tagtggtgca ggagcgcagc ctgagcctgg ccgacaaggt ggcggccatc aactactcga	13920

tgctgagcct	gggcaagttt	tacgcgcgca	agatctacca	gacgccgtac	gtgcccatag	13980
acaaggaggt	gaagatcgac	ggttttttaca	tgcgcatggc	gctgaaggtg	ctcaccctga	14040
gcgacgacct	gggcgtgtac	cgcaacgagc	gcatccacaa	ggccgtgagc	gtgagccggc	14100
ggcgcgagct	gagcgaccgc	gagctgatgc	acagcctgca	gcgggcgctg	gcgggcgccg	14160
gcagcggcga	cagggaggcg	gagtcctact	tcgatgcggg	ggcggacctg	cgctgggcgc	14220
ccagccggcg	ggccctggag	gccgcggggg	tccgcgagga	ctatgacgag	gacggcgagg	14280
aggatgagga	gtacgagcta	gaggagggcg	agtacctgga	ctaaaccgcg	ggtggtgttt	14340
ccggtagatg	caagacccga	acgtggtgga	cccggcgctg	cgggcggctc	tgacagagcca	14400
gccgtccggc	cttaactcct	cagacgactg	gcgacaggtc	atggaccgca	tcatgtcgct	14460
gacggcgctg	aacccggacg	cgttccggca	gcagccgcag	gccaacaggc	tctccgccat	14520
cctggaggcg	gtggtgcctg	cgcgctcgaa	ccccacgcac	gagaaggtgc	tggccatagt	14580
gaacgcgctg	gccgagaaca	gggccatccg	cccggacgag	gccgggctgg	tgtacgacgc	14640
gctgctgcag	cgcgtagggc	gctacaacag	cggcaacgtg	cagaccaacc	tggaccggct	14700
ggtggggggc	gtgcgcgagg	cggtaggcgc	gcgcgagcgc	gcggatcggc	agggcaacct	14760
gggctccatg	gtggcgctga	atgccttcct	gagcacgcag	ccggccaacg	tgccgcgggg	14820
gcaggaagac	tacaccaact	ttgtgagcgc	gctgcggctg	atggtgaccg	agacccccca	14880
gagcgagggtg	taccagtcgg	gcccggacta	cttcttcag	accagcagac	agggcctgca	14940
gacggtgaac	ctgagccagg	ctttcaagaa	cctgcggggg	ctgtggggcg	tgaaggcgcc	15000
caccggcgac	cgggcgacgg	tgtccagcct	gctgacgccc	aactcgcgcc	tgctgctgct	15060
gctgatcgcg	ccgttcacgg	acagcggcag	cgtgtcccgg	gacacctacc	tggggcacct	15120
gctgaccctg	taccgcgagg	ccatcgggca	ggcgcagggtg	gacgagcaca	ccttcaggga	15180
gatcaccagc	gtgagccgcg	cgctggggca	ggaggacacg	agcagcctgg	aggcgactct	15240
gaactacctg	ctgaccaacc	ggcggcagaa	gattccctcg	ctgcacagcc	tgacctccga	15300
ggaggagcgc	atcttgcgct	acgtgcagca	gagcgtgagc	ctgaacctga	tgcgcgacgg	15360
ggtgacgccc	agcgtggcgc	tggacatgac	cgcgcgcaac	atggaaccgg	gcatgtacgc	15420
cgcgacaccg	ccttacatca	accgcctgat	ggactacctg	catcgcgcgg	cggccgtgaa	15480
ccccgagtac	tttaccaacg	ccatcctgaa	ccgcactgg	ctcccgccgc	ccgggttcta	15540

cagcgggggc	ttcagagtcc	cggagaccaa	cgatggcttc	ctgtgggacg	acatggacga	15600
cagcgtgttc	tccccgcggc	cgcaggcgct	ggcggaagcg	tccctgctgc	gtcccaagaa	15660
ggaggaggag	gaggaggcga	gtcgccgccg	cggcagcagc	ggcgtggctt	ctctgtccga	15720
gctggggggc	gcagccgccg	cgcgccccgg	gtccctgggc	ggcagcccct	ttccgagcct	15780
ggtgggggtct	ctgcacagcg	agcgcaccac	ccgccctcgg	ctgctgggcg	aggacgagta	15840
cctgaataac	tccctgctgc	agccggtgcg	ggagaaaaac	ctgcctccc	ccttccccaa	15900
caacgggata	gagagcctgg	tggacaagat	gagcagatgg	aagacctatg	cgcaggagca	15960
cagggacgcg	cctgcgctcc	ggccgcccac	gcggcgccag	cgccacgacc	ggcagcgggg	16020
gctggtgtgg	gatgacgagg	actccgcgga	cgatagcagc	gtgctggacc	tgggaggggag	16080
cggcaacccg	ttcgcgccac	tgcgcccccg	cctggggagg	atgttttaaa	aaaaaaaaaa	16140
aaangcaaga	agcatgatgc	aaaaattaaa	taaaactcac	caaggccatg	gcgaccgagc	16200
gttggtttct	tgtgttcctt	tcagtatgcg	gcgcgcggcg	atgtaccagg	agggacctcc	16260
tccctcttac	gagagcgtgg	tgggcgcggc	ggcggcgggc	ccctcttctc	cctttgcgtc	16320
gcagctgctg	gagccgccgt	acgtgcctcc	gcgctacctg	cggcctacgg	gggggagaaa	16380
cagcatccgt	tactcggagc	tggcgcccct	gttcgacacc	acccgggtgt	acctggtgga	16440
caacaagtcg	gcggacgtgg	cctccctgaa	ctaccagaac	gaccacagca	atTTTTtgac	16500
cacggtcatc	cagaacaatg	actacagccc	gagcgaggcc	agcaccaga	ccatcaatct	16560
ggatgaccgg	tcgcactggg	gcggcgacct	gaaaaccatc	ctgcacacca	acatgcccaa	16620
cgtgaacgag	ttcatgttca	ccaataagtt	caaggcgcg	gtgatggtgt	cgcgctcgca	16680
caccaaggaa	gaccgggtgg	agctgaagta	cgagtgggtg	gagttcgagc	tgccagaggg	16740
caactactcc	gagaccatga	ccattgacct	gatgaacaac	gcgatcgtgg	agcactatct	16800
gaaagtgggc	aggcagaacg	gggtcctgga	gagcgacatc	ggggtcaagt	tcgacaccag	16860
gaacttccgc	ctggggctgg	accccgtagc	cgggctgggt	atgcccgggg	tgtacaccaa	16920
cgaggccttc	catcccgaca	tcctcctgct	gcccggctgc	ggggtggact	tcacttacag	16980
ccgcctgagc	aacctcctgg	gcatccgcaa	gcggcagccc	ttccaggagg	gcttcaggat	17040
cacctacgag	gacctggagg	ggggcaacat	ccccgcgctc	ctcgatgtgg	aggcctacca	17100
ggatagcttg	aaggaaaatg	aggcgggaca	ggaggatacc	gccccgccg	cctccgccgc	17160

cgccgagcag	ggcgaggatg	ctgctgacac	cgcgggccgcg	gacggggcag	aggccgaccc	17220
cgctatggtg	gtggaggctc	ccgagcagga	ggaggacatg	aatgacagtg	cggtgcgcgg	17280
agacaccttc	gtcaccggg	gggaggaaaa	gcaagcggag	gccgaggccg	cggccgagga	17340
aaagcaactg	gcggcagcag	cggcgggcggc	ggcgttggcc	gcggcgagg	ctgagtctga	17400
ggggaccaag	cccgccaaagg	agcccgtgat	taagcccctg	accgaagata	gcaagaagcg	17460
cagttacaac	ctgctcaagg	acagcaccaa	caccgcgtac	cgcagctggt	acctggccta	17520
caactacggc	gacccgtcga	cgggggtgcg	ctcctggacc	ctgctgtgca	cgccggacgt	17580
gacctgcggc	tcggagcagg	tgtactggtc	gctgcccgc	atgatgcaag	accccgtgac	17640
cttccgctcc	acgcggcagg	tcagcaactt	cccggtggtg	ggcgccgagc	tgctgcccgt	17700
gcactccaag	agcttctaca	acgaccaggc	cgctactacc	cagctcatcc	gccagttcac	17760
ctctctgacc	cacgtgttca	atcgctttcc	tgagaaccag	attctggcgc	gcccgcgcgc	17820
ccccaccatc	accaccgtca	gtgaaaacgt	tcctgctctc	acagatcacg	ggacgctacc	17880
gctgcgcaac	agcatcggag	gagtccagcg	agtgaccgtt	actgacgcca	gacgccgcac	17940
ctgcccctac	gtttacaagg	ccttgggcat	agtctcgccg	cgcgctcttt	ccagccgcac	18000
tttttgagca	acaccacat	catgtccatc	ctgatctcac	ccagcaataa	ctccggctgg	18060
ggactgctgc	gcgcgcccag	caagatgttc	ggaggggcca	ggaagcgttc	cgagcagcac	18120
cccgtgcgcg	tgcgcgggca	cttccgcgcc	ccctggggag	cgcacaaacg	cggccgcgcg	18180
gggcgcacca	ccgtggacga	cgccatcgac	tcggtggtgg	agcaggcgcg	caactacagg	18240
cccgcggtct	ctaccgtgga	cgcgcccatc	cagaccgtgg	tgcggggcgc	gcggcggtac	18300
gccaagctga	agagccgccg	gaagcgctg	gcccgcgcc	accgccgccg	acccggggcc	18360
gccgccaac	gcgccgccgc	ggccctgctt	cgccgggcca	agcgcacggg	ccgccgcgcc	18420
gcatgaggg	ccgcgcgccg	cttggccgcc	ggcatcaccg	ccgccacat	ggcccccggt	18480
acccgaagac	gcgcggccgc	cgccgccgcc	gccgccatca	gtgacatggc	cagcaggcgc	18540
cggggcaacg	tgtactgggt	gcgcgactcg	gtgaccggca	cgcgctgcc	cgtgcgttc	18600
cgcccccg	ggacttgaga	tgatgtgaaa	aaacaacact	gagtctcctg	ctgttgtgtg	18660
tatcccagcg	gcggcgccgc	gcgcagcgtc	atgtccaagc	gcaaaatcaa	agaagagatg	18720
ctccaggtcg	tcgcgccgga	gatctatggg	ccccgaaga	aggaagagca	ggattcgaag	18780

ccccgcaaga taaagcgggt caaaaagaaa aagaaagatg atgacgatgc cgatggggag	18840
gtggagttcc tgcgcgccac ggcgcccagg cgcccgggtgc agtgggaaggg ccggcgcgta	18900
aagcgcgtcc tgcgccccgg caccgcggtg gtcttcacgc ccggcgagcg ctccacccgg	18960
actttcaagc gcgtctatga cgaggtgtac ggcgacgaag acctgctgga gcaggccaac	19020
gagcgcttcg gagagtttgc ttacgggaag cgtcagcggg cgctggggaa ggaggacctg	19080
ctggcgctgc cgctggacca gggcaacccc acccccagtc tgaagcccgt gacctgcag	19140
caggtgctgc cgagcagcgc accctccgag gcgaagcggg gtctgaagcg cgaggcggc	19200
gacctggcgc ccaccgtgca gctcatggtg cccaagcggc agaggctgga ggatgtgctg	19260
gagaaaatga aagtagacct cggctctgcag ccggacatca ggggtccgcc catcaagcag	19320
gtggcgccgg gcctcggcgt gcagaccgtg gacgtggtca tccccaccgg caactcccc	19380
gccgccgcca ccactaccgc tgcctccacg gacatggaga cacagaccga tcccgccgca	19440
gccgcagccg cagccgccgc cgcgacctcc tcggcggagg tgcagacgga cccctggctg	19500
ccgccggcga tgtcagctcc ccgcgcgcgt cgcgggcgca ggaagtacgg cgccgccaac	19560
gcgctcctgc ccgagtacgc cttgcatcct tccatcgcg cccacccccg ctaccgaggc	19620
tatacctacc gcccgcaag agccaagggt tccaccgcc gtccccgccg acgcgccgcc	19680
gccaccaccc gccgccgccg ccgcagacgc cagccgcac tggctccagt ctccgtgagg	19740
aaagtggcgc gcgacggaca caccctggtg ctgcccaggg cgcgctacca cccagcatc	19800
gtttaaaagc ctgttggtgt tcttgagat atggccctca cttgccgcct ccgtttcccg	19860
gtgccgggat accgaggagg aagatcgcg cgcaggaggg gtctggccgg ccgcggcctg	19920
agcggaggca gccgccgcgc gcaccggcgg cgacgcgcca ccagccgacg catgcgcggc	19980
ggggtgctgc ccctgttaat ccccctgac gccgcggcga tcggcgccgt gcccgggatc	20040
gcctccgtgg cttgcaagc gtcccagagg cattgacaga cttgcaaact tgcaaatatg	20100
gaaaaaaaaa cccaataaa aaagtctaga ctctcacgct cgcttggtcc tgtgactatt	20160
ttgtagaatg gaagacatca actttgcgtc gctggccccg cgtcacggct cgcgccggtt	20220
cctgggacac tggaacgata tcggcaccag caacatgagc ggtggcgcct tcagttgggg	20280
ctctctgtgg agcggcatta aaagtatcgg gtctgccgtt aaaaattacg gctccgggc	20340
ctggaacagc agcacgggcc agatgttgag agacaagttg aaagagcaga acttccagca	20400

gaaggtggtg gagggcctgg cctccggcat caacggggtg gtggacctgg ccaaccaggc	20460
cgtgcagaat aagatcaaca gcagactgga cccccggccg ccggtggagg aggtgccgcc	20520
ggcgctggag acggtgtccc ccgatgggcg tggcgagaag cgcccgcggc ccgataggga	20580
agagaccact ctggtcacgc agaccgatga gccgcccccg tatgaggagg ccctgaagca	20640
aggtctgccc accacgcggc ccatcgcgcc catggccacc ggggtggtgg gccgccacac	20700
ccccgccacg ctggacttgc ctccgcccgc cgatgtgccg cagcagcaga aggcggcaca	20760
gccgggccccg cccgcgaccg cctcccgttc ctccgccggt cctctgcgcc gcgcggccag	20820
cggccccgc gggggggtcg cgaggcacgg caactggcag agcacgctga acagcatcgt	20880
gggtctgggg gtgcggtccg tgaagcgccg ccgatgctac tgaatagctt agctaactgt	20940
ttgtatgtgt gtatgcgccc tatgtcgccg ccagaggagc tgctgagtcg ccgccgttcg	21000
cgcgcccacc accaccgcca ctccgcccct caagatggcg accccatcga tgatgccgca	21060
gtggtcgtac atgcacatct cgggccagga cgcctcggag tacctgagcc ccgggctggt	21120
gcagttcgcc cgcgccaccg agagctactt cagcctgagt aacaagtta ggaacccac	21180
ggtggcgccc acgcacgatg tgaccaccga ccggtctcag cgcctgacgc tgcggttcac	21240
tcccgtggac cgcgaggaca ccgcgtactc gtacaaggcg cggttcaccc tggccgtggg	21300
cgacaaccgc gtgctggaca tggcctccac ctactttgac atccgcgggg tgctggaccg	21360
gggtcccact ttcaagccct actctggcac cgcctacaac tccctggccc ccaagggcgc	21420
tcccaactcc tgcgagtggg agcaagagga aactcaggca gttgaagaag cagcagaaga	21480
ggaagaagaa gatgctgacg gtcaagctga ggaagagcaa gcagctacca aaaagactca	21540
tgtatatgct caggctcccc tttctggcga aaaaattagt aaagatggtc tgcaaatagg	21600
aacggacgct acagctacag aacaaaaacc tatttatgca gaccctacat tccagcccga	21660
accccaaadc ggggagtccc agtggaatga ggcagatgct acagtcgccg gcggtagagt	21720
gctaaagaaa tctactccca tgaaaccatg ctatggttcc tatgcaagac ccacaaatgc	21780
taatggagggt cagggtgtac taacggcaaa tgcccaggga cagctagaat ctcaggttga	21840
aatgcaattc ttttcaactt ctgaaaacgc ccgtaacgag gctaacaaca ttcagcccaa	21900
attggtgctg tatagtgagg atgtgcacat ggagaccccg gatacgacc tttcttacia	21960
gcccgcacaa agcgatgaca attcaaaaat catgctgggt cagcagtcca tgcccaacag	22020

acctaattac atcggcttca gagacaactt tatcggcctc atgtattaca atagcactgg	22080
caacatggga gtgcttgag gtcaggcctc tcagttgaat gcagtgggtg acttgcaaga	22140
cagaaacaca gaactgtcct accagctctt gcttgattcc atgggtgaca gaaccagata	22200
cttttccatg tggaatcagg cagtggacag ttatgaccca gatgttagaa ttattgaaaa	22260
tcattggaact gaagacgagc tccccaaacta ttgtttccct ctgggtggca taggggtaac	22320
tgacacttac caggctgtta aaaccaacaa tggcaataac gggggccagg tgacttggac	22380
aaaagatgaa acttttgcag atcgcaatga aataggggtg ggaaacaatt tcgctatgga	22440
gatcaacctc agtgccaacc tgtggagaaa cttcctgtac tccaacgtgg cgctgtacct	22500
accagacaag ctttaagtaca acccctccaa tgtggacatc tctgacaacc ccaacaccta	22560
cgattacatg aacaagcgag tgggtggcccc ggggctgggtg gactgctaca tcaacctggg	22620
cgcgcgctgg tcgctggact acatggacaa cgtcaacccc ttcaaccacc accgcaatgc	22680
gggcctgcg taccgctcca tgctcctggg caacgggcgc tacgtgccct tccacatcca	22740
ggtgccccag aagttctttg ccatcaagaa cctcctcctc ctgccgggct cctacaccta	22800
cgagtggaac ttcaggaagg atgtcaacat ggtcctccag agctctctgg gtaacgatct	22860
cagggtggac ggggccagca tcaagttcga gagcatctgc ctctacgcca ctttcttccc	22920
catggcccac aacacggcct ccacgctcga ggccatgctc aggaacgaca ccaacgacca	22980
gtccttcaat gactacctct ccgccgcaa catgctctac ccatacccg ccaacgccac	23040
caacgtcccc atctccatcc cctcgcgcaa ctgggcggcc ttccgcggct gggccttcac	23100
ccgcctcaag accaaggaga cccctcctt gggctcggga ttcgaccct actacaccta	23160
ctcgggctcc attccctacc tggacggcac cttctacctc aaccacactt tcaagaaggt	23220
ctcggtcacc ttcgactcct cggtcagctg gccgggcaac gaccgtctgc tcacccccaa	23280
cgagttcgag atcaagcgct cggtcgacgg ggagggtac aacgtggccc agtgcaacat	23340
gaccaaggac tggttcctgg tccagatgct ggccaactac aacatcggt accagggtt	23400
ctacatcca gagagctaca aggacaggat gtactccttc ttcaggaact tccagcccat	23460
gagccggcag gtgggtggacc agaccaagta caaggactac caggaggtgg gcatcatcca	23520
ccagcacaac aactcgggct tcgtgggcta cctcgcccc accatgcgcg agggacaggc	23580
ctaccccgcc aacttcccct atccgctcat aggcaagacc gcggtcgaca gcatcaccca	23640

gaaaaagttc ctctgcgacc gcaccctctg gcgcatcccc ttctccagca acttcatgtc	23700
catgggtgcg ctctcggacc tgggccagaa cttgctctac gccaaactccg cccacgcctt	23760
cgacatgacc ttcgaggctcg accccatgga cgagcccacc cttctctatg ttctgttcga	23820
agtctttgac gtgggtccggg tccaccagcc gcaccgcggc gtcatcgaga ccgtgtacct	23880
gcgtacgccc ttctcggccg gcaacgccac cacctaaaga agcaagccgc agtcatcgcc	23940
gcctgcatgc cgtcgggttc caccgagcaa gagctcaggg ccatcgtcag agacctggga	24000
tgcggggcct attttttggg caccttcgac aagcgcttcc ctggctttgt ctccccacac	24060
aagctggcct gcgccatcgt caacacggcc ggccgcgaga ccgggggcggt gcactggctg	24120
gccttcgcct ggaacccgcg ctccaaaaca tgcttctctt ttgacctt cggcttttcg	24180
gaccagcggc tcaagcaaat ctacgagttc gagtacgagg gcttgctgcg tcgcagcgcc	24240
atgcctcct cgcccaccg ctgcgtcacc ctcgaaaagt ccaccagac cgtgcagggg	24300
cccgactcgg ccgcctgcgg tctcttctgc tgcatgtttc tgcacgcctt tgtgcactgg	24360
cctcagagtc ccatggaccg caaccccacc atgaacttgc tgacgggggt gcccaactcc	24420
atgctccaga gccccaggt cgagcccacc ctgcgccgca accaggagca gctctacagc	24480
ttcttgagc gccactcgcc ttacttcgc cgccacagcg cacagatcag gagggccacc	24540
tccttctgcc acttgcaaga gatgcaagaa gggtaataac gatgtacaca ctttttttct	24600
caataaatgg catcttttta ttataacaag ctctctgggg tattcatttc ccaccaccac	24660
ccgccgttgt cgccatctgg ctctatttag aaatcgaaag ggttctgccg ggagtcgccg	24720
tgcgccacgg gcagggacac gttgcgatac tggtagcggg tgccccactt gaactcgggc	24780
accaccaggc gaggcagctc ggggaagttt tcgctccaca ggctgcgggt cagcaccagc	24840
gcgttcatca ggtcgggcgc cgagatcttg aagtcgcagt tggggccgcc gccctgcgcg	24900
cgcgagttgc ggtacaccgg gttgcagcac tggaacacca acagcgccgg gtgcttcacg	24960
ctggccagca cgctgcggtc ggagatcagc tcggcgtcca ggtcctccgc gttgctcagc	25020
gcgaacgggg tcatcttggg cacttgccgc cccaggaagg gcgcgtgccc cggtttcgag	25080
ttgcagtcgc agcgcagcgg gatcagcagg tgcccgtgcc cggactcggc gttgggggtac	25140
agcgcgcgca tgaaggcctg catctggcgg aaggccatct gggccttggc gccctccgag	25200
aagaacatgc cgcaggactt gcccgagaac tggtttgcgg ggcagctggc gtcgtgcagg	25260

cagcagcgcg cgtcgggtgtt ggcgatctgc accacgttgc gccccaccg gttcttcacg	25320
atcttggcct tggacgattg ctccttcagc gcgcgctgcc cgttctcgct ggtcacatcc	25380
atctcgatca catgttcctt gttcaccatg ctgctgccgt gcagacactt cagctcgccc	25440
tccgtctcgg tgcagcgggtg ctgccacagc gcgcagcccg tgggctcgaa agacttgtag	25500
gtcacctccg cgaaggactg caggtacccc tgcaaaaagc ggcccatcat ggtcacgaag	25560
gtcttgttgc tgctgaaggt cagctgcagc ccgcgggtgct cctcgttcag ccaggtcttg	25620
cacacggccg ccagcgcctc cacctggctg ggcagcatct tgaagttcac cttcagctca	25680
ttctccacgt ggtacttgtc catcagcgtg cgcgccgcct ccatgccctt ctcccaggcc	25740
gacaccagcg gcaggctcac ggggttcttc accatcaccg tggccgccgc ctccgccgcg	25800
ctttcgcttt ccgccccgct gttctcttcc tcttcctcct cttcctcgcc gccgccact	25860
cgcagcccc gcaccacggg gtcgtcttcc tgcaggcgct gcaccttgcg cttgccgttg	25920
cggccctgct tgatgcgcac gggcgggttg ctgaagccca ccatcaccag cgcggcctct	25980
tcttgctcgt cctcgctgtc cagaatgacc tccggggagg gggggttggt catcctcagt	26040
accgaggcac gcttcttttt cttcctgggg gcgttcgcca gctccgcggc tgcggccgct	26100
gccgaggctg aaggccgagg gctgggcgtg cgcggcacca gcgcgtcctg cgagccgtcc	26160
tcgtcctcct cggactcgag acggaggcgg gcccgcttct tcggggggcg gcggggcggc	26220
ggaggcggcg gcggcgacgg agacggggac gagacatcgt ccagggtggg tggacggcgg	26280
gccgcgccgc gtccgcgctc ggggggtggtc tcgcgctggt cctcttcccg actggccatc	26340
tcccactgct ctttctccta taggcagaaa gagatcatgg agtctctcat gcgagtcgag	26400
aaggaggagg acagcctaac cgccccctct gagccctcca ccaccgccgc caccaccgcc	26460
aatgccgccg cggacgacgc gccaccgag accaccgcca gtaccaccct cccagcgac	26520
gcacccccgc tcgagaatga agtgctgac gagcaggacc cgggttttgt gagcggagag	26580
gaggatgagg tggatgagaa ggagaaggag gaggtcgccg cctcagtgcc aaaagaggat	26640
aaaaagcaag accaggacga cgcagataag gatgagacag cagtcgggcg ggggaacgga	26700
agccatgatg ctgatgacgg ctacctagac gtgggagacg acgtgctgct taagcacctg	26760
caccgccagt gcgtcatcgt ctgcgacgcg ctgcaggagc gctgcgaagt gccctggac	26820
gtggcggagg tcagccgcgc ctacgagcgg cacctcttcg cgccgcacgt gcccccaag	26880

cgccgggaga acggcacctg cgagcccaac ccgcgtctca acttctaccc ggtcttcgcg	26940
gtacccgagg tgctggccac ctaccacatc tttttccaaa actgcaagat cccctctcc	27000
tgccgcgcca accgcacccg cgccgacaaa accctgaccc tgcggcaggg cgcccacata	27060
cctgatatcg cctctctgga ggaagtggcc aagatcttcg agggctctcg tcgacgag	27120
aaacgggagg cgaacgctct gcacggagac agcgaaaacg agagtcactc gggggtgctg	27180
gtggagctcg agggcgacaa cgcgcgctg gccgtactca agcgacgcat agaggtcacc	27240
cactttgcct acccggcgct caacctggcc cccaaggctc tgagtgtggt catgggcgag	27300
ctcatcatgc gccgcgcca gcccctggcc gcggatgcaa acttgcaaga gtcctccgag	27360
gaaggcctgc ccgcggtcag cgacgagcag ctggcgcgct ggctggagac ccgcgacccc	27420
gcgcagctgg aggagcggcg caagctcatg atggccgcgg tgctggtcac cgtggagctc	27480
gagtgtctgc agcgcttctt cgcggaaccc gagatgcagc gcaagctcga ggagaccctg	27540
cactacacct tccgccaggg ctacgtgcgc caggcctgca agatctccaa cgtggagctc	27600
tgcaacctgg tctcctacct gggcatcctg cagagaacc gcctcgggca gaacgtcctg	27660
cactccaccc tcaaagggga ggcgcgccgc gactacatcc gcgactgcgc ctacctcttc	27720
ctctgctaca cctggcagac ggccatgggg gtctggcagc agtgccctgga ggagcgcaac	27780
ctcaaggagc tggaaaagct cctcaagcgc accctcaggg acctctggac gggcttcaac	27840
gagcgctcgg tggccgccgc gctggcggac atcatctttc ccgagcgcct gctcaagacc	27900
ctgcagcagg gcctgcccga cttaccagc cagagcatgc tgcagaactt caggactttc	27960
atcctggagc gctcgggcat cctgccggcc acttgctgcg cgctgccag cgacttcgtg	28020
cccatcaagt acagggagtg cccgccgccg ctctggggcc actgctacct cttccagctg	28080
gccaactacc tcgcctacca ctcggacctc atggaagacg tgagcggcga gggcctgctc	28140
gagtgccact gccgctgcaa cctctgcacg cccaccgct ctctagtctg caaccgcag	28200
ctgctcagcg agagtcagat tatcggtagc ttcgagctgc agggtcctc gcctgacgag	28260
aagtccgcgg ctccagggtg gaaactcact ccggggctgt ggacttcgc ctacctacgc	28320
aaatttgtac ctgaggacta ccacgccac gagatcaggt tctacgaaga ccaatccgc	28380
ccgccaagg cgagctcac cgctgcgtc atcaccagg ggcacatcct gggccaattg	28440
caagccatca acaaagcccg ccgagagttc ttgctgaaaa agggtcgggg ggtgtacctg	28500

gacccccagt ccggcgagga gctaaacccg ctacccccgc cgccgccccca gcagcgggac	28560
cttgcttccc aggatggcac ccagaaagaa gcagcagccg ccgccgccgc cgcagccata	28620
catgcttctg gaggaagagg aggaggactg ggacagtcag gcagaggagg tttcggacga	28680
ggagcaggag gagatgatgg aagactggga ggaggacagc agcctagacg aggaagcttc	28740
agaggccgaa gaggtggcag acgcaacacc atcgccctcg gtcgcagccc cctcgccggg	28800
gccccgaaa tcctccgaac ccagcaccag cgctataacc tccgctcctc cggcgccggc	28860
gccacccgcc cgcagaccca accgtagatg ggacaccaca ggaaccgggg tcggtaatc	28920
caagtggccg ccgccgccac cgcagcagca gcagcagcag cgccagggct accgctcgtg	28980
gcgcggggcac aagaacgcca tagtcgcctg cttgcaagac tgcgggggca acatctcttt	29040
cgcccgccgc ttcctgctat tccaccacgg ggtcgccttt ccccgcaatg tcctgcatta	29100
ctaccgtcat ctctacagcc cctactgcag cggcgaccca gaggcggcag cggcagccac	29160
agcggcgacc accacctagg aagatatcct ccgcgggcaa gacagcggca gcagcggcca	29220
ggagacccgc ggagcagcgc gcgggagcgg tgggcgcact gcgcctctcg cccaacgaac	29280
ccctctcgac ccgggagctc agacacagga tcttccccac tttgtatgcc atcttccaac	29340
agagcagagg ccaggagcag gagctgaaaa taaaaaacag atctctgcgc tccctcacc	29400
gcagctgtct gtatcacaaa agcgaagatc agcttcggcg cacgctggag gacgcggagg	29460
cactcttcag caaatactgc gcgctcactc ttaaagacta gctccgcgcc cttctcgaat	29520
ttaggcggga gaaaactacg tcatcgccgg ccgccgccca gcccgcccag ccgagatgag	29580
caaagagatt cccacgcat acatgtggag ctaccagccg cagatgggac tcgcggcggg	29640
agcggcccag gactactcca cccgcatgaa ctacatgagc gcgggacccc acatgatctc	29700
acaggtcaac gggatccgcg cccagcgaac ccaaatactg ctggaacagg cggccatcac	29760
cgccacgccc cgccataatc tcaacccccg aaattggccc gccgccctcg tgtaccagga	29820
aacccccctc gccaccaccg tactacttcc gcgtgacgcc caggccgaag tccagatgac	29880
taactcaggg gcgcagctcg cgggcggctt tcgtcacggg gcgcggccgc tccgaccagg	29940
tataagacac ctgatgatca gaggccgagg tatccagctc aacgacgagt cggtgagctc	30000
ttcgctcggg ctccgtccgg acggaacttt ccagctcgcc ggatccggcc gctcttcggt	30060
cacgccccgc caggcgtacc tgactctgca gacctcgtcc tcggagcccc gctccggcgg	30120

catcggaacc ctccagttcg tggaggagtt cgtgccctcg gtctacttca accccttctc	30180
gggacctccc ggacgctacc ccgaccagtt cattccgaac tttgacgcgg tgaaggactc	30240
ggcggacggc tacgactgaa tgtcaggtgt cgaggcagag cagcttcgcc tgagacacct	30300
cgagcactgc cgccgccaca agtgcttcgc ccgcggttct ggtgagttct gctactttca	30360
gctacccgag gagcataccg aggggccggc gcacggcgtc cgcctgacca cccagggcga	30420
ggttacctgt tccctcatcc gggagtttac cctccgtccc ctgctagtgg agcgggagcg	30480
gggtcccctgt gtcctaacta tcgcctgcaa ctgccctaac cctggattac atcaagatct	30540
ttgctgtcat ctctgtgctg agtttaataa acgctgagat cagaatctac tgggatttag	30600
tcccctttaa ctaatcaaac actggaatca ataaaaagaa tcacttactt aaaatcagac	30660
agcaggtctc tgtccagttt attcagcagc acctccttcc cctcctccca actctggtac	30720
tccaaacgcc ttctggcggc aaacttcctc cacaccctga agggaatgtc agattcttgc	30780
tcctgtccct ccgcaccac tatcttcatg ttgttgacaga tgaagcgcac caaacgtct	30840
gacgagagct tcaacccgt gtacccctat gacacggaaa gcggccctcc ctccgtccct	30900
ttcctcacc ctcccttcgt gtctcccgat ggattccaag aaagtcccc cggggtcctg	30960
tctctgaacc tggccgagcc cctggtcact tcccacggca tgctcgccct gaaaatggga	31020
agtggcctct ccctggacga cgctggcaac ctcacctctc aagatatcac caccgctagc	31080
cctccccctca aaaaaaccaa gaccaacctc agcctagaaa cctcatcccc cctaactgtg	31140
agcacctcag gcgccctcac cgtagcagcc gccgctcccc tggcgggtggc cggcacctcc	31200
ctcaccatgc aatcagaggc ccccctgaca gtacaggatg caaaactcac cctggccacc	31260
aaaggcccc tgaccgtgtc tgaaggcaaa ctggccttgc aaacatcggc cccgctgacg	31320
gccgctgaca gcagcacct cacagtcagt gccacaccac cccttagcac aagcaatggc	31380
agcttgggta ttgacatgca agccccatt tacaccacca atggaaaact aggacttaac	31440
tttggcgctc ccctgcatgt ggtagacagc ctaaattgcac tgactgtagt tactggccaa	31500
ggtcttacga taaacggaac agccctacaa actagagtct caggtgccct caactatgac	31560
acatcaggaa acctagaatt gagagctgca gggggtatgc gagttgatgc aaatgggtcaa	31620
cttatccttg atgtagctta cccatttgat gcacaaaaca atctcagcct taggcttgga	31680
cagggacccc tgtttgtaa ctctgccac aacttgatg ttaactacaa cagaggcctc	31740

tacctgttca catctggaaa taccaaaaag ctagaagtta atatcaaaac agccaagggt	31800
ctcatttatg atgacactgc tatagcaatc aatgcgggtg atgggctaca gtttgactca	31860
ggctcagata caaatccatt aaaaactaaa cttggattag gactggatta tgactccagc	31920
agagccataa ttgctaaact gggaactggc ctaagctttg acaacacagg tgccatcaca	31980
gtaggcaaca aaaatgatga caagcttacc ttgtggacca caccagacc atcccctaac	32040
tgtagaatct attcagagaa agatgctaaa ttcacacttg ttttgactaa atgcggcagt	32100
caggtgttgg ccagcgtttc tgttttatct gtaaaaggta gccttgcgcc catcagtggc	32160
acagtaacta gtgctcagat tgtcctcaga tttgatgaaa atggagttct actaagcaat	32220
tcttcccttg accctcaata ctggaactac agaaaagggtg accttacaga gggcactgca	32280
tataccaacg cagtgggatt tatgccaac ctcacagcat acccaaaaac acagagccaa	32340
actgctaaaa gcaacattgt aagtcagggt tacttgaatg gggacaaatc caaaccatg	32400
accctcacca ttaccctcaa tggaactaat gaaacaggag atgccacagt aagcacttac	32460
tccatgtcat tctcatggaa ctggaatgga agtaattaca ttaatgaaac gttccaaacc	32520
aactccttca ctttctccta catcgcccaa gaataaaaag catgacgctg ttgatttgat	32580
tcaatgtgtt tctgttttat tttcaagcac aacaaaatca ttcaagtcatt tcttccatct	32640
tagcttaata gacacagtag cttaatagac ccagtagtgc aaagcccat tctagcttat	32700
aactagtgga gaagtactcg cctacatggg ggtagagtca taatcgtgca tcaggatagg	32760
gcgggtggtgc tgcagcagcg cggaataaaa ctgctgccgc cgccgctccg tcctgcagga	32820
atacaacatg gcagtgtct cctcagcgat gattcgcacc gcccgagca taaggcgctt	32880
tgtcctccgg gcacagcagc gcaccctgat ctacttaaa tcagcacagt aactgcagca	32940
cagcaccaca atattgttca aaatcccaca gtgcaaggcg ctgtatcaa agctcatggc	33000
ggggaccaca gaaccacgt ggccatcata ccacaagcg aggtagatta agtggcgacc	33060
cctcataaac acgctggaca taaacattac ctcttttggc atgttgtaat tcaccacctc	33120
ccggtaccat ataaacctct gattaaacat ggcgccatcc accaccatcc taaaccagct	33180
ggccaaaacc tgcccgccgg ctatacactg cagggaaccg ggactggaac aatgacagt	33240
gagagcccag gactcgtaac catggatcat catgctcgtc atgatatcaa tgttggcaca	33300
acacaggcac acgtgcatac acttctcag gattacaagc tcctcccgcg ttagaaccat	33360

atcccagga acaaccatt cctgaatcag cgtaaattccc acactgcagg gaagacctcg	33420
cacgtaactc acgttgtgca ttgtcaaagt gttacattcg ggcagcagcg gatgatcctc	33480
cagtatggta gcgcggggttt ctgtctcaaa aggaggtaga cgatccctac tgtacggagt	33540
gcgccgagac aaccgagatc gtgttggtcg tagtgtcatg ccaaattggaa cgccggacgt	33600
agtcataattt cctgaagtct tagatctctc aacgcagcac cagcaccaac acttcgcagt	33660
gtaaaaggcc aagtgccgag agagtatata taggaataaa aagtgcgta aacgggcaaa	33720
gtccaaaaaa cgcccagaaa aaccgcacgc gaacctacgc cccgaaacga aagccaaaaa	33780
acactagaca ctcccttccg gcgtcaactt ccgctttccc acgctacgtc acttgcccca	33840
gtcaaacaaa ctacatatcc cgaacttcca agtcgccacg cccaaaacac cgcctacacc	33900
tccccgcccg ccggcccgc cccaaaccg cctcccgccc cgcgccccgc cccgcgccgc	33960
ccatctcatt atcatattgg cttcaatcca aaataaggta tattattgat gatggtttaa	34020
acggatcctc tagagtcgac ctgcaggcat gcaagcttga gtattctata gtgtcaccta	34080
aatagcttgg cgtaatcatg gtcatactg tttcctgtgt gaaattgtta tccgctcaca	34140
attccacaca acatacgagc cggaagcata aagtgtaaag cctgggggtgc ctaatgagtg	34200
agctaactca cattaattgc gttgcgctca ctgcccgtt tccagtcggg aaacctgtcg	34260
tgccagctgc attaataaat cgccaacgc gaacccttg cgccgcccg ggccgtcgac	34320
caattctcat gtttgacagc ttatcatcga atttctgcca ttcattccgt tattatcact	34380
tattcaggcg tagcaaccag gcgtttaagg gcaccaataa ctgccttaaa aaaattacgc	34440
cccgccctgc cactcatcgc agtactgttg taattcatta agcattctgc cgacatggaa	34500
gccatcacia acggcatgat gaacctgaat cgccagcggc atcagcacct tgtcgccttg	34560
cgtataatat ttgcccattg tgaaaacggg ggcaagaag ttgtccatat tggccacgtt	34620
taaatcaaaa ctggtgaaac tcaccagggt attggctgag acgaaaaaca tattctcaat	34680
aaacccttta gggaaatagg ccagggtttt accgtaacac gccacatctt gcgaatatat	34740
gtgtagaaac tgccggaaat cgtcgtggta ttcactccag agcgatgaaa acgtttcagt	34800
ttgctcatgg aaaacggtgt aacaagggtg aacactatcc catatcacca gctcaccgtc	34860
tttcattgcc atacggaatt ccggatgagc attcatcagg cgggcaagaa tgtgaataaa	34920
ggccggataa aacttgtgtt tatttttctt tacggtcttt aaaaaggccg taatatccag	34980

ctgaacggtc	tggttatagg	tacattgagc	aactgactga	aatgcctcaa	aatgttcttt	35040
acgatgccat	tgggatatat	caacggtggt	atatccagtg	atTTTTTct	ccattttagc	35100
ttccttagct	cctgaaaatc	tcgataactc	aaaaaatacg	cccggtagtg	atcttatttc	35160
attatggtga	aagttggaac	ctcttacgtg	ccgatcaacg	tctcattttc	gccaaaagtt	35220
ggcccagggc	ttcccggtat	caacagggac	accaggattt	atttattctg	cgaagtgatc	35280
ttccgtcaca	ggtattttatt	cgcgataagc	tcatggagcg	gcgtaaccgt	cgcacaggaa	35340
ggacagagaa	agcgcggatc	tgggaagtga	cggacagaac	ggtcaggacc	tggattgggg	35400
aggcggttgc	cgccgctgct	gctgacggtg	tgacgttctc	tgttccggtc	acaccacata	35460
cgttccgcca	ttcctatgcg	atgcacatgc	tgtatgccgg	tataccgctg	aaagttctgc	35520
aaagcctgat	gggacataag	tccatcagtt	caacggaagt	ctacacgaag	gtttttgcgc	35580
tggatgtggc	tgcccggcac	cgggtgcagt	ttgcgatgcc	ggagtctgat	gcggttgcca	35640
tgctgaaaca	attatcctga	gaataaatgc	cttggccttt	atatggaaat	gtggaactga	35700
gtggatatgc	tgTTTTTgtc	tgTTaaacag	agaagctggc	tgTTatccac	tgagaagcga	35760
acgaaacagt	cgggaaaatc	tcccattatc	gtagagatcc	gcattattaa	tctcaggagc	35820
ctgtgtagcg	tttataggaa	gtagtgttct	gtcatgatgc	ctgcaagcgg	taacgaaaac	35880
gatttgaata	tgcttccagg	aacaatagaa	atcttcgtgc	ggtgttacgt	tgaagtggag	35940
cggattatgt	cagcaatgga	cagaacaacc	taatgaacac	agaaccatga	tgtggtctgt	36000
ccttttacag	ccagtagtgc	tcgccgcagt	cgagcgacag	ggcgaagccc	tcgagtgagc	36060
gaggaagcac	cagggaacag	cacttatata	ttctgcttac	acacgatgcc	tgaaaaaact	36120
tcccttgggg	ttatccactt	atccacgggg	atatttttat	aattattttt	tttatagttt	36180
ttagatcttc	tttttttagag	cgccttgtag	gcctttatcc	atgctggttc	tagagaaggt	36240
gttgtgacaa	attgcccttt	cagtgtgaca	aatcaccttc	aaatgacagt	cctgtctgtg	36300
acaaattgcc	cttaaccctg	tgacaaattg	ccctcagaag	aagctgtttt	ttcacaaagt	36360
tatccctgct	tattgactct	tttttattta	gtgtgacaat	ctaaaaactt	gtcacacttc	36420
acatggatct	gtcatggcgg	aaacagcggg	tatcaatcac	aagaaacgta	aaaatagccc	36480
gcgaatcgtc	cagtcaaacg	acctcactga	ggcggcatat	agtctctccc	gggatcaaaa	36540
acgtatgctg	tatctgttcg	ttgaccagat	cagaaaatct	gatggcacc	tacaggaaca	36600

tgacggtatc tgcgagatcc atgttgctaa atatgctgaa atattcggat tgacctctgc	36660
ggaagccagt aaggatatac ggcaggcatt gaagagtttc gcggggaagg aagtggtttt	36720
ttatcgccct gaagaggatg ccggcgatga aaaaggctat gaatcttttc cttggtttat	36780
caaacgtgcg cacagtccat ccagagggct ttacagtgtg catatcaacc catatctcat	36840
tcccttcttt atcgggttac agaaccggtt tacgcagttt cggcttagtg aaacaaaaga	36900
aatcaccaat ccgtatgcc a tgcgtttata cgaatccctg tgtcagtatc gtaagccgga	36960
tggctcaggc atcgtctctc tgaaaatcga ctggatcata gagcgttacc agctgcctca	37020
aagttaccag cgtatgcctg acttccgccg ccgcttcctg caggtctgtg ttaatgagat	37080
caacagcaga actccaatgc gcctctcata cattgagaaa aagaaaggcc gccagacgac	37140
tcatatcgta ttttccttcc gcgatatac ttccatgacg acaggatagt ctgagggtta	37200
tctgtcacag atttgagggt ggttcgtcac atttgttctg acctactgag ggtaatttgt	37260
cacagttttg ctgtttcctt cagcctgcat ggattttctc atactttttg aactgtaatt	37320
tttaaggaag ccaaatttga gggcagtttg tcacagttga tttccttctc tttcccttcg	37380
tcatgtgacc tgatatcggg ggtagttcg tcatcattga tgagggttga ttatcacagt	37440
ttattactct gaattggcta tccgcgtgtg tacctctacc tggagttttt cccacggtgg	37500
atatttcttc ttgcgctgag cgtaagagct atctgacaga acagttcttc tttgcttcct	37560
cgccagttcg ctcgctatgc tcggttacac ggctgcggcg agcgctagtg ataataagtg	37620
actgaggtat gtgctcttct tatctccttt tgtagtgttg ctcttatttt aaacaacttt	37680
gcgggttttt gatgactttg cgattttgtt gttgctttgc agtaaattgc aagatttaat	37740
aaaaaacgc aaagcaatga tttaaaggatg ttcagaatga aactcatgga aacacttaac	37800
cagtgcataa acgctggtca tgaaatgacg aaggctatcg ccattgcaca gtttaatgat	37860
gacagcccgg aagcgaggaa aataaccg cgctggagaa taggtgaagc agcggattta	37920
gttggggttt cttctcaggc tatcagagat gccgagaaag cagggcgact accgcacccg	37980
gatatggaaa ttcgaggacg ggttgagcaa cgtgttggtt atacaattga acaaattaat	38040
catatgcgtg atgtgtttgg tacgcgattg cgacgtgctg aagacgtatt tccaccggtg	38100
atcgggggtg ctgcccataa aggtggcggt taaaaacct cagtttctgt tcatcttgct	38160
caggatctgg ctctgaagg gctacgtgtt ttgctcgtgg aaggtaacga ccccaggga	38220

acagcctcaa	tgtatcacgg	atgggtacca	gatcttcata	ttcatgcaga	agacactctc	38280
ctgcctttct	atcttgggga	aaaggacgat	gtcacttatg	caataaagcc	cacttgctgg	38340
ccggggcctt	acattattcc	ttcctgtctg	gctctgcacc	gtattgaaac	tgagttaatg	38400
ggcaaatttg	atgaaggtaa	actgcccacc	gatccacacc	tgatgctccg	actggccatt	38460
gaaactgttg	ctcatgacta	tgatgtcata	gttattgaca	gcgcgcctaa	cctgggtatc	38520
ggcacgatta	atgtcgtatg	tgctgctgat	gtgctgattg	ttcccacgcc	tgctgagttg	38580
tttgactaca	cctccgcact	gcagtttttc	gatatgcttc	gtgatctgct	caagaacgtt	38640
gatcttaaag	ggttcgagcc	tgatgtacgt	attttgctta	ccaaatacag	caatagtaat	38700
ggctctcagt	ccccgtggat	ggaggagcaa	attcgggatg	cctggggaag	catggttcta	38760
aaaaatgttg	tacgtgaaac	ggatgaagtt	ggtaaaggtc	agatccggat	gagaactggt	38820
tttgaacagg	ccattgatca	acgctcttca	actggtgcct	ggagaaatgc	tctttctatt	38880
tgggaacctg	tctgcaatga	aattttcgat	cgtctgatta	aaccacgctg	ggagattaga	38940
taatgaagcg	tgcgcctggt	attccaaaac	atacgctcaa	tactcaaccg	gttgaagata	39000
cttcgttatc	gacaccagct	gccccgatgg	tggattcgtt	aattgcgcgc	gtaggagtaa	39060
tggctcgcgg	taatgccatt	actttgcctg	tatgtggtcg	ggatgtgaag	tttactcttg	39120
aagtgctccg	gggtgatagt	gttgagaaga	cctctcgggt	atggtcaggt	aatgaacgtg	39180
accaggagct	gcttactgag	gacgcactgg	atgatctcat	cccttctttt	ctactgactg	39240
gtcaacagac	accggcgttc	ggtcgaagag	tatctggtgt	catagaaatt	gccgatggga	39300
gtcgccgtcg	taaagctgct	gcacttaccg	aaagtgatta	tcgtgttctg	gttggcgagc	39360
tggatgatga	gcagatggct	gcattatcca	gattgggtaa	cgattatcgc	ccaacaagtg	39420
cttatgaacg	tggtcagcgt	tatgcaagcc	gattgcagaa	tgaatttgct	ggaaatattt	39480
ctgcgctggc	tgatgcggaa	aatatttcac	gtaagattat	tacccgctgt	atcaacaccg	39540
ccaaattgcc	taaatcagtt	gttgctcttt	tttctcacc	cggtgaacta	tctgcccggt	39600
caggtgatgc	acttcaaaaa	gcctttacag	ataaagagga	attacttaag	cagcaggcat	39660
ctaaccttca	tgagcagaaa	aaagctgggg	tgatatttga	agctgaagaa	gttatcactc	39720
ttttaacttc	tgtgcttaaa	acgtcatctg	catcaagaac	tagtttaagc	tcacgacatc	39780
agtttgctcc	tggagcgaca	gtattgtata	agggcgataa	aatggtgctt	aacctggaca	39840

ggctctcgtgt	tccaactgag	tgtatagaga	aaattgaggc	cattcttaag	gaacttgaaa	39900
agccagcacc	ctgatgcgac	cacgttttag	tctacgttta	tctgtcttta	cttaatgtcc	39960
tttgttacag	gccagaaagc	ataactggcc	tgaatattct	ctctgggccc	actgttccac	40020
ttgtatcgtc	ggctcgataa	tcagactggg	accacgggcc	cactcgtatc	gtcgggtctga	40080
ttattagtct	gggaccacgg	tcccactcgt	atcgctcggtc	tgattattag	tctgggacca	40140
cgggtcccact	cgtatcgtcg	gtctgataat	cagactggga	ccacgggtccc	actcgtatcg	40200
tcgggtctgat	tattagtctg	ggaccatggg	cccactcgta	tcgtcgggtct	gattattagt	40260
ctgggaccac	gggtcccactc	gtatcgtcgg	tctgattatt	agtctggaac	cacgggtccca	40320
ctcgtatcgt	cgggtctgatt	attagtctgg	gaccacgggc	ccactcgtat	cgtcgggtctg	40380
attattagtc	tgggaccacg	atcccactcg	tgttgctcgg	ctgattatcg	gtctgggacc	40440
acgggtcccac	ttgtattgtc	gatcagacta	tcagcgtgag	actacgattc	catcaatgcc	40500
tgtcaagggc	aagtattgac	atgtcgtcgt	aacctgtaga	acggagtaac	ctcgggtgtgc	40560
ggttgtatgc	ctgctgtgga	ttgctgctgt	gtcctgctta	tccacaacat	tttgcgcacg	40620
gttatgtgga	caaaatacct	ggttaccacg	gccgtgccgg	cacgttaacc	gggctgcatc	40680
cgatgcaagt	gtgtcgtcgt	cgacgagctc	gcgagctcgg	acatgagggt	gccccgtatt	40740
cagtgtcgct	gatttgtatt	gtctgaagtt	gtttttacgt	taagttgatg	cagatcaatt	40800
aatacgatac	ctgcgtcata	attgattatt	tgacgtgggt	tgatggcctc	cacgcacgtt	40860
gtgatatgta	gatgataatc	attatcactt	tacgggtcct	ttccgggtgat	ccgacagggt	40920
acggggcgggc	gacctcgcg	gttttcgcta	tttatgaaaa	ttttccgggt	taaggcggtt	40980
ccgttcttct	tcgtcataac	ttaatgtttt	tattttaaatt	accctctgaa	aagaaaggaa	41040
acgacagggtg	ctgaaagcga	gctttttggc	ctctgtcggt	tcctttctct	gtttttgtcc	41100
gtggaatgaa	caatggaagt	ccgagctcat	cgctaataac	ttcgtatagc	atacattata	41160
cgaagttata	ttcgatgcgg	ccgcaagggg	ttcgcgtcag	cgggtgttgg	cgggtgtcgg	41220
ggctggctta	actatgcggc	atcagagcag	attgtactga	gagtgcacca	tatgcgggtg	41280
gaaataccgc	acagatgcgt	aaggagaaaa	taccgcatca	ggcgccattc	gccattcagg	41340
ctgcgcaact	gttgggaagg	gcgatcgggtg	cgggcctctt	cgctattacg	ccagctggcg	41400
aaaggggggat	gtgctgcaag	gcgattaagt	tgggtaacgc	cagggttttc	ccagtcacga	41460

cgttgtaaaa cgacggccag tgaattgtaa tacgactcac tatagggcga attcgagctc	41520
ggtacccggg gatcctcgtt taaac	41545

<210> 54
 <211> 42220
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<220>
 <221> modified_base
 <222> (16789)..(16789)
 <223> a, c, t, g, unknown or other

<400> 54	
catcatcaat aatatacctt attttggatt gaagccaata tgataatgag atgggcggcg	60
cggggcgggg cgcgggcggg gaggcgggtt tggggcgggg ccggcgggcg gggcggtgtg	120
gcggaagtgg actttgtaag tgtggcggat gtgacttgct agtgccgggc gcggtaaaag	180
tgacgttttc cgtgcgcgac aacgccccg ggaagtgaca tttttccgc ggtttttacc	240
ggatgttgta gtgaatttgg gcgtaaccaa gtaagatttg gccattttcg cgggaaaact	300
gaaacgggga agtgaaatct gattaatttt gcgttagtca taccgcgtaa tatttgtcta	360
gggccgaggg actttggccg attacgtgga ggactcgccc aggtgttttt tgaggtgaat	420
ttccgcgttc cgggtcaaag tctgcgtttt attattatag gatatcccat tgcatacgtt	480
gtatccatat cataatatgt acatttatat tggctcatgt ccaacattac cgccatgttg	540
acattgatta ttgactagtt attaatagta atcaattacg gggtcattag ttcatagccc	600
atatatggag ttccgcgtta cataacttac ggtaaattggc ccgcctggct gaccgcccaa	660
cgacccccgc ccattgacgt caataatgac gtatgttccc atagtaacgc caatagggac	720
tttcattga cgtcaatggg tggagtattt acggtaaact gccacttgg cagtacatca	780
agtgtatcat atgccaagta cgccccctat tgacgtcaat gacggtaaatt ggccgcctg	840
gcattatgcc cagtacatga ccttatggga ctttcctact tggcagtaca tctacgtatt	900
agtcacgct attaccatgg tgatgcggtt ttggcagtac atcaatgggc gtggatagcg	960

gtttgactca cggggatttc caagtctcca cccattgac gtcaatggga gtttgttttg	1020
gcacaaaaat caacgggact ttccaaaatg tcgtaacaac tccgccccat tgacgcaaat	1080
gggcggtagg cgtgtacggt gggagggtcta tataagcaga gctctcccta tcagtgatag	1140
agatctccct atcagtgata gagatcgtcg acgagctcgt ttagtgaacc gtcagatcgc	1200
ctggagacgc catccacgct gttttgacct ccatagaaga caccgggacc gatccagcct	1260
ccgcggccgg gaacggtgca ttggaacgcg gattccccgt gccaaagagtg agatcttccg	1320
tttatctagg taccagatat cgccaccatg gacgaccagc gggacctgat cagcaacaac	1380
gagcagctgc ccatgctggg ccagaggcct ggcgcccctg agagcaagtg tagcagaggc	1440
gccgtgtaca ccgtgttcag catcctggtg gccctgctgc tggccggaca ggccaccacc	1500
gcctactttc tgtatcagca gcagggacgg ctggacaagc tgaccgtgac cagccagaac	1560
ctgcagctgg aaaacctgcg gatgaagctg cccaagccc ccaagcccct gagccagatg	1620
agaatggcca cccccctgct gatgcaggcc ctgcctatgg ccggcctgcc ccagaaaccc	1680
atgcagaacg ccaccaagca cggcaacatg accgaggacc acgtgatgca tctgctgctg	1740
aacgccgacc ccctgaaggt gtacccccca ctgaagggca gcctgagcga gaacctgaag	1800
cacctgaaga acaccatgga aaccatggac tggaaggtgt tcgagagctg gctgcaccac	1860
tggctgctgt tcgagatgag caagcacagc ctggaacaga agcccaccga ggcccctccc	1920
aaagagagcc tggaactgga agatcccagc agcggcctgg gcgtgaccaa gcaggatctg	1980
ggccccgtgg ctatgtccga ggactttctg attctgatcg ccatcctggt gatcgtgatt	2040
ctcgtgggca caatcacaac cctggtgggc gccatcggcg gcattagggc caggaggagc	2100
ttcctcttca tttgcatctt cttcctgttc ctctccctct tcctgacaat cctcgccctg	2160
ctgctgggct tcagctggct cctgctggtg gccatcctgt tctgggtgct ctggctggtc	2220
atcctcattc tgctgctgct ggtgtaccct attcctcacc accccctgcc cacctccctc	2280
aggtttagaa tgaagcagag ggtgagcagc gacccacag gttctgacag aagccctcag	2340
ggcagccata atagcctgaa ctccccgat gaggaggacc ccaaggatga caccaagcaa	2400
cctctgtgca acatgacca gggcggacct cccgtcaatg gacagctcct cggacaacat	2460
gctcaatgcc cccctcacta tccctgctgc catattcagc atcccgacgg agaggattcc	2520
gatggagacg atggcaagtc ctggggcgat gccggagagg aagacaatgg ccctaacgac	2580

cctaacaccg ccagcaccag agagtccatt tacgaggacc tcagataccc cacaagggac	2640
gccaatggcg agtatgagaa cgtgggatac ccccctaggg acggagatgc ccctcatagg	2700
ctcggagagc ctgtgtatga cgatgtggag caagccaccg ctaacgaggt gagaatctcc	2760
cctctgttca gactgcccta cggaagcgct ttcggacctg gccccagcc tggacccatt	2820
ctggagagct ccacatgggg ctttctggtc ttcacacaga cctccctggt cgccgacgac	2880
attgccgacg ctattagga ctactgcaca acccacctg gcccacaag gaacaccag	2940
gtggtcctca tgaacttca gggcagcgga gtgcccctgc ctatgttttt tccccctgga	3000
gaggagacag aagagcagag agagggcgat agagctagcg actccgacga gtccgaagac	3060
gctcagatcc tgaccgtgtt ctgcctgttt tgccagtga cactctttat ctgcctggga	3120
atcaggatga tctgtaactg gaggggcaaa ctcaccagga tcctctgcct gaagtctgc	3180
ctctacggac tgatttccgc ctccctgtcc ttcggctggt acgcttttct gaaggaagtg	3240
accctcccca ccacagccac cgttgatcct aggcaactcc ccctgttcct cttcatcctg	3300
agctccgtgc tggtgattct cgccatcatg atggagtttc aaacatcctc cagcctcttc	3360
gctgctctgt tcgtgattat cgccggaatg ctgtgcgtca cagtgggcgt gatTTTTctg	3420
ctggctggcg tcaagcctct cctgagcggc atgatctgcg cctccggcat cacaatgctc	3480
gtgctcggcg tcgtgctgct ggtggtgtgc accagagatg agcacgctat ttccgccagc	3540
caccatgcta gcgatggctc cgtgaatcag cagaaggaaa atcagcccca gaccctggag	3600
gaatgcaaga cagatcagga gaggaagagg tacaggaaca ggctggcctc caggaggtgt	3660
agagctaagt tcaggaacca gctggaacat tttaggacag tcgccgtgc taagacagag	3720
gagaacaaca ggctcagggt gctcatcagg cagatgtgtc ctacactgga cgtggaatcc	3780
atcgtcccct ccacctccgc cggctaccac gagcctctga atcacctgac ccacagcccc	3840
agcccttgct atcacaggga tgaaccccc tccagaagcc ccagccctca acccaccgtc	3900
tccgagcagt cccagcagtc ccccaggcag cagagccctc aaggcacatc ccagggttct	3960
acaagacctc aggtgcctgg aggcgccacc accagaaaaa gaggcggcgt gagaggccaa	4020
cctgccaagt gtcacggcaa gtacaccaca accgccgagg gactgaccgc tctcctgaat	4080
aggaggcaca gcccaggac atccaacgag ggcaggtgga tgaatggagt catggctgtg	4140
aacctctcca aatggcccct gtacagcctg aggagagccc tggccctcgc catggctcct	4200

agaaggaggc tctccggccc tccctggctg acagtgctgc tgctgctgtc cacactgagc	4260
gtggccgccc tgctgattct cttcctgatt ttcagcgccg gcgccaccat tagcacagaa	4320
gccagcctgc tggtcctgct cctgctgttt gtgaccctgc tgctgcctct cctgtcctcc	4380
aacggactcc agctccctgc cgccctgatt ctgatccagt gtttcctcct ggccgctgat	4440
tatctcgcct acctgattct gcctaccatt atgcccaggg gcagaagcac aggaaggaag	4500
ggcagggaca cagagaaaga gaggagcaga tccccctca gagctcctgg cggttctgat	4560
ggaccagca caagggctgg ctgtggagcc ggaccctgtc agctgagcag ccccatcgcc	4620
ggaaacaacg gcaatgaagg cggcgagggc gacgactaca agagctggag gaagcccag	4680
gaagaggaca acggcccaa tgacccaat accaacaaca ggattgagga tggagacggc	4740
gacgacggaa aatcctggag gaatcctgag gaggaggata acagaaagca ggacaggctg	4800
ggcaccaagc ctttcatgga cctcgacgga accggcgag gcgagggcta cagccagatg	4860
gtccctatcg ccaccgcccc cggaagcggc cacgccgcta cctatcagga tctccaggcc	4920
gccccctaca tcatctggcc tctccagacc gattgccagc ctgtggctac caccttcgcc	4980
tccccggac agatccagt gtatacaagc gccgtcccc agcccacaga gcattgctcc	5040
cagtttaca acgctccac cgtcaaccag cagcagccta ttagccaacc ccagcccga	5100
aatccccctg ctttcacctt taccagccc gcttccatca ttcccggcgt cattagcgcc	5160
tccaacctga acgtgagcgc ttcccctatc atccctagcg accatgtcct ccccatcatt	5220
acctccgtga ccagcctcgc ccaacctaat aacatggccg gccactggta tgagagcgtg	5280
attcccggcc tgttcctctg ccccctgatc ctcccttccc tgttctggat ttgctccctg	5340
ctgaccttcc tgggtgggcca cggagccaat attgtgagcg ccgtcctgtt cctcgtgctg	5400
gcttggtgtc tcctcattgc caactggaac gtgacaagag aggacttcgt gtccggcagg	5460
agaagctcca tgagcagcct gtccgtggcc gcttccaccg ccacagccat gttcgccagc	5520
ttcctcacc tgagctttga tggcctgggc ctgctgctgt ttggcaccgc cctggtgatc	5580
cagacaattt acgtgctgta tctggtggtc atggagatca ccgtgtggat catgatgttt	5640
aggtatctcc acttttggat caccctgctg ttcctgctga gccccattat tctctccgtc	5700
gcctgtctca tcatccaatc ctccgccctg ctgatcgagg ctgtggtcgt caccaccatc	5760
acagtcctgg ccatttttct gtggctccct cctcaaggcg ctgaggccga tctcggcacc	5820

gccctgctga ttctgaatac cgccctgtgc ctggctgtgc tgatcctgac cgctatccct	5880
acatgatgat gagcggccgc gatctgctgt gccttctagt tgccagccat ctgttgtttg	5940
cccctcccc gtgccttcct tgaccctgga aggtgccact cccactgtcc tttcctaata	6000
aaatgaggaa attgcatcgc attgtctgag taggtgtcat tctattctgg ggggtgggt	6060
ggggcaggac agcaaggggg aggattggga agacaatagc aggcattgctg gggatgcggt	6120
gggctctatg gccgatcagc gatcgtgag gtgggtgagt gggcgtggcc tggggtggtc	6180
atgaaaatat ataagtggg ggtcttaggg tctctttatt tgtgttgag agaccgccgg	6240
agccatgagc gggagcagca gcagcagc tagcagcagc gccttgatg gcagcatcgt	6300
gagcccttat ttgacgacgc ggatgcccc ctggggccggg gtgcgtcaga atgtgatggg	6360
ctccagcatc gacggccgac ccgtcctgcc cgcaaattcc gccacgctga cctatgcgac	6420
cgtcgcgggg acgccgttg acgccaccgc cgccgccgcc gccaccgag ccgcctcggc	6480
cgtgcgcagc ctggccacgg actttgcatt cctgggacca ctggcgacag gggctacttc	6540
tcgggccgct gctgccgccg ttcgcgatga caagctgacc gccctgctgg cgcagttgga	6600
tgcgcttact cgggaactgg gtgaccttc tcagcaggtc atggccctgc gccagcaggt	6660
ctcctccctg caagctggcg ggaatgcttc tcccacaaat gccgtttaag ataaataaaa	6720
ccagactctg tttggattaa agaaaagtag caagtgcatt gctctcttta tttcataatt	6780
ttccgcgcgc gataggccct agaccagcgt tctcggtcgt tgagggtgcg gtgtatcttc	6840
tccaggacgt ggtagagggt gctctggacg ttgagataca tgggcatgag ccggtcccgg	6900
gggtggagggt agcaccactg cagagcttca tgctccgggg tgggtgttgta gatgatccag	6960
tcgtagcagg agcgtgggc atggtgccta aaaatgtcct tcagcagcag gccgatggcc	7020
agggggaggc ctttgttgta agtgtttaca aaacggttaa gttgggaagg gtgcattcgg	7080
ggagagatga tgtgcatctt ggactgtatt tttagattgg cgatgtttcc gccagatcc	7140
cttctgggat tcatgttggt caggaccacc agtacagtgt atccggtgca cttggggaat	7200
ttgtcatgca gcttagaggg aaaagcgtgg aagaacttgg agacgccttt gtggcctccc	7260
agattttcca tgcatcgtc catgatgatg gcaatgggcc cgcgggaggc agcttgggca	7320
aagatatttc tggggtcgct gacgtcgtag ttgtgttcca gggtagagtc gtcataggcc	7380
atttttacaa agcgcgggcg gaggggtgcc gactggggga tgatggtccc ctctggccct	7440

ggggcgtagt tgccctcgca gatctgcatt tcccaggcct taatctcgga ggggggaatc	7500
atatccacct gcggggcgat gaagaaaacg gtttccggag ccggggagat taactgggat	7560
gagagcaggt ttctaagcag ctgtgatttt ccacaaccgg tgggcccata aataacacct	7620
ataaccggtt gcagctggta gtttagagag ctgcagctgc cgtcgtcccg gaggaggggg	7680
gccacctcgt tgagcatgtc cctgacgcgc atgttctccc cgaccagatc cgccagaagg	7740
cgctcgccgc ccagggacag cagctcttgc aaggaagcaa agtttttcag cggcttgagg	7800
ccgtccgccg tgggcatgtt tttcagggtc tggctcagca gctccaggcg gtcccagagc	7860
tcggtgacgt gctctacggc atctctatcc agcatatctc ctcgtttcgc gggttggggc	7920
gactttcgct gtagggcacc aagcggtggt cgtccagcgg ggccagagtc atgtccttcc	7980
atgggcgag ggtcctcgtc aggggtggtc gggtcacggt gaaggggtgc gctccgggct	8040
gagcgcttgc caaggtgcgc ttgaggctgg ttctgctggt gctgaagcgc tgccggtctt	8100
cgccctgcgc gtcggccagg tagcatttga ccatggtgtc atagtccagc ccctccgcgg	8160
cgtgtccctt ggcgcgagc ttgcccttgg aggtggcgcc gcacgagggg cagagcaggc	8220
tcttgagcgc gtagagcttg ggggagagga agaccgattc gggggagtag gcgtccgcgc	8280
cgcagacccc gcacacggtc tcgcactcca ccagccaggt gagctcgggg cgcgccgggt	8340
caaaaaccag gtttcccca tgctttttga tgcgtttctt acctcgggtc tccatgaggt	8400
ggtgtccccg ctcggtgacg aagaggctgt ccgtgtctcc gtagaccgac ttgaggggtc	8460
ttttctccag gggggtccct cggctcttct cgtagaggaa ctcggaccac tctgagacga	8520
aggcccgct ccaggccagg acgaaggagg ctatgtggga ggggtagcgg tcgttgtcca	8580
ctagggggtc caccttctcc aaggtgtgaa gacacatgtc gccttcctcg gcgtccagga	8640
aggtgattgg cttgtaggtg taggccacgt gaccgggggt tcctgacggg ggggtataaa	8700
aggggggtggg ggcgcgctcg tcgtcactct cttccgcatc gctgtctgcg agggccagct	8760
gctgggggtga gtattccctc tcgaaggcgg gcatgacctc cgcgctgagg ttgtcagttt	8820
ccaaaaacga ggaggatttg atgttcacct gtcccaggt gatacctttg aggggtacccg	8880
cgtccatctg gtcagaaaac acgatctttt tattgtccag cttggtggcg aacgaccctg	8940
agagggcggt ggagagcagc ttggcgatgg agcgaggggt ctggttcttg tccctgtcgg	9000
cgcgctcctt ggccgcgatg ttgagctgca cgtactcgcg cgcgacgcag cgccactcgg	9060

ggaagacggt ggtgcgctcg tcgggcacca ggcgcacgcg ccagccgcgg ttgtgcaggg	9120
tgaccaggctc cacgctgggtg gcgacctcgc cgcgcaggcg ctcgttgggtc cagcagagac	9180
ggccgccctt gcgcgagcag aaggggggca gggggtcgag ctgggtctcg tccggggggt	9240
ccgctccac ggtgaaaacc ccggggcgca ggcgcgcgtc gaagtagtct atcttgcaac	9300
cttgcattgtc cagcgcctgc tgccagtcgc gggcggcgag cgcgcgctcg taggggttga	9360
gcggcgggccc ccagggcattg ggggtgggtga gtgcggaggc gtacatgccg cagatgtcat	9420
agacgtagag gggctcccgc aggaccccga tgtaggtggg gtagcagcgg ccgccgcgga	9480
tgctggcgcg cacgtagtca tacagctcgt gcgagggggc gaggaggtcg gggcccaggt	9540
tggtgcgggc ggggcgctcc gcgcggaaga cgatctgcct gaagatggca tgcgagttgg	9600
aagagatggt ggggcgctgg aagacgttga agctggcgtc ctgcaggccg acggcgtcgc	9660
gcacgaagga ggcgtaggag tcgcgcagct tgtgtaccag ctcggcggtg acctgcacgt	9720
cgagcgcgca gtagtcgagg gtctcgcgga tgatgtcata tttagcctgc cccttctttt	9780
tccacagctc gcggttgagg aaaaactctt cgcggtcttt ccagtactct tggatcggga	9840
aaccgtccgg ttccgaacgg taagagccta gcatgtagaa ctggttgacg gcctggtagg	9900
cgcagcagcc cttctccacg gggagggcgt aggcctgcgc ggccctgcgg agcgaggtgt	9960
gggtcagggc gaaggtgtcc ctgaccatga ctttgaggta ctggtgcttg aagtcggagt	10020
cgtcgcagcc gccccgctcc cagagcgaga agtcgggtgcg cttcttgagg cgggggttgg	10080
gcagagcgaa ggtgacatcg ttgaagagga ttttgccgc gcggggcatg aagttgcggg	10140
tgatgcggaa gggccccggc acttcagagc ggttggtgat gacctgggcg gcgagcacga	10200
tctcgtcgaa gccgttgatg ttgtggccca cgatgtagag ttccaggaag cggggccggc	10260
cccttacggt gggcagcttc tttagctctt cgtaggtgag ctcctcgggc gaggcgaggc	10320
cgtgctcggc caggggccag tccgcgaggt gcgggttgtc tctgaggaag gacttccaga	10380
ggtcgcgggc caggagggtc tgcaggcggc ctctgaaggt cctgaactgg cggcccacgg	10440
ccattttttc gggggtgatg cagtagaagg tgaggggggtc ttgctgccag cgggtcccagt	10500
cgagctgcag ggcgaggtcg cgcgcggcgg tgaccaggcg ctcgtcgccc ccgaatttca	10560
tgaccagcat gaagggcacg agctgctttc cgaaggcccc catccaagtg taggtctcta	10620
catcgtaggt gacaaagagg cgctccgtgc gaggatgcga gccgatcggg aagaactgga	10680

tctcccccca ccagttggag gagtggctgt tgatgtggtg gaagtagaag tcccgtcgcc	10740
gggccgaaca ctcgtgctgg cttttgtaaa agcgagcgca gtactggcag cgctgcacgg	10800
gctgtacctc atgcacgaga tgcacctttc gcccgcgcac gaggaagccg aggggaaatc	10860
tgagcccccc gcctggctcg cggcatggct ggttctcttc tactttggat gcgtgtccgt	10920
ctccgtctgg ctctcagagg ggtgttacgg tggagcggac caccacgccg cgcgagccgc	10980
aggtccagat atcggcgcgc ggcggtcgga gtttgatgac gacatcgcgc agctgggagc	11040
tgtccatggg ctggagctcc cgcggcggcg gcaggtcagc cgggagttct tgcaggttca	11100
cctcgagag tcgggccagg gcgcggggca ggtctaggtg gtacctgac tctaggggcg	11160
tgttggtggc ggcgtcgatg gcttgcagga gcccgcagcc ccggggggcg acgacggtgc	11220
ccgcgggggt ggtggtggtg gtggcgggtgc agctcagaag cggtgccgcg ggcgggcccc	11280
cggaggtagg gggggctccg gtcccgcggg caggggcggc agcggcacgt cggcgtggag	11340
cgcgggcagg agttggtgct gtgcccggag gttgctggcg aaggcgacga cgcggcggtt	11400
gatctcctgg atctggcgcc tctgcgtgaa gacgacgggc ccggtgagct tgaacctgaa	11460
agagagtctg acagaatcaa tctcggtgtc attgaccgcg gcctggcgca ggatctcctg	11520
cacgtctccc gagttgtctt ggtaggcgat ctcgcccatg aactgctcga tctcttcctc	11580
ctggaggtct ccgcgtccgg cgcgttccac ggtggccgcc aggtcgttgg agatgcgccc	11640
catgagctgc gagaaggcgt tgagtccgcc ctcgttccag actcggctgt agaccacgcc	11700
cccctggtca tcgcgggcgc gcatgaccac ctgcgcgagg ttgagctcca cgtgccgcgc	11760
gaagacggcg tagttgcga gacgctggaa gaggtagttg aggggtggtg cgggtgtgctc	11820
ggccacgaag aagttcatga cccagcggcg caacgtggat tcgttgatgt cccccaaggc	11880
ctccagccgt tccatggcct cgtagaagtc cacggcgaag ttgaaaaact gggagttgcg	11940
cgccgacacg gtcaactcct cctccagaag acggatgagc tcggcgacgg tgtcgcgcac	12000
ctcgcgctcg aaggctatgg ggatctcttc ctccgctagc atcaccacct cctcctcttc	12060
ctcctcttct ggcacttcca tgatggcttc ctctcttctg ggggggtggcg gcggcggcgg	12120
tgggggaggg ggcgctctgc gccggcggcg gcgcaccggg aggcggtcca cgaagcgcgc	12180
gatcatctcc ccgcggcggc ggcgcatggg ctcggtgacg gcgcggccgt tctcccgggg	12240
gcgcagttgg aagacgccg cggacatctg gtgctggggc gggtggccgt gaggcagcga	12300

gacggcgctg acgatgcatc tcaacaattg ctgcgtaggt acgccgccga gggacctgag	12360
ggagtccata tccaccggat ccgaaaacct ttcgaggaag gcgtctaacc agtcgcagtc	12420
gcaaggtagg ctgagcacccg tggcggggcgg cgggggggtgg ggggagtgtc tggcggaggt	12480
gctgctgatg atgtaattga agtaggcgga cttgacacgg cggatggtcg acaggagcac	12540
catgtccttg ggtccggcct gctggatgcg gaggcggtcg gctatgcccc aggcttcgtt	12600
ctggcatcgg cgcaggtcct tgtagtagtc ttgcatgagc ctttccaccg gcacctcttc	12660
tccttcctct tctgcttctt ccatgtctgc ttcgccctg gggcggcgcc gcgccccct	12720
gcccccatg cgcgtgacct cgaacccccct gagcggttgg agcagggcca ggtcggcgac	12780
gacgcgctcg gccaggatgg cctgctgcac ctgcgtgagg gtggtttggga agtcatccaa	12840
gtccacgaag cggtggtagg cgcccgtgtt gatggtgtag gtgcagttgg ccatgacgga	12900
ccagttgacg gtctgggtggc ccggttgca catctcgggtg tacctgagtc gcgagtaggc	12960
gcgggagtcg aagacgtagt cgttgcaagt ccgcaccagg tactggtagc ccaccaggaa	13020
gtcggcgggc ggctggcggg agaggggcca gcgcagggtg gcgggggctc cgggggcccag	13080
gtcttccagc atgaggcggg gtagggcgta gatgtacctg gacatccagg tgataccgcg	13140
ggcggtggtg gaggcgcgcg ggaagtcgcg cacccggttc cagatgttgc gcaggggcag	13200
aaagtgtccc atggtaggcg tgctctgtcc agtcagacgc gcgcagtcgt tgatactcta	13260
gaccagggaa aacgaaagcc ggtcagcggg cactcttccg tggctctggtg aatagatcgc	13320
aagggtatca tggcggaggg cctcggttcg agccccgggt ccgggccgga cgggtccgcca	13380
tgatccacgc ggttaccgcc cgcgtgtcga acccaggtgt gcgacgtcag acaacggtgg	13440
agtgttcctt ttggcgtttt tctggccggg cgccggcgcc gcgtaagaga ctaagccgcg	13500
aaagcgaaag cagtaagtgg ctgcctcccc gtagccggag ggatccttgc taagggttgc	13560
gttgcggcga accccggttc gaatcccgta ctcgggccgg ccggacccgc ggctaagggtg	13620
ttggattggc ctccccctcg tataaagacc ccgcttgccg attgactccg gacacgggga	13680
cgagccccctt ttatTTTTTgc tttccccaga tgcattccgt gctgcggcag atgcgcccc	13740
cgccccagca gcagcaaaa caccagcaag agcggcagca acagcagcgg gagtcatgca	13800
gggccccctc acccaccctc ggcggggcgg ccacctcggc gtccgcggcc gtgtctggcg	13860
cctgcggcgg cggcgggggg ccggctgacg accccgagga gccccgcgg cgcagggcca	13920

gacactacct	ggacctggag	gagggcgagg	gcctggcgcg	gctgggggcg	ccgtctccc	13980
agcgccaccc	gcgggtgcag	ctgaagcgcg	actcgcgca	ggcgtacgtg	cctcggcaga	14040
acctgttcag	ggaccgcgcg	ggcgaggagc	ccgaggagat	gcgggacagg	aggttcagcg	14100
cagggcgggga	gctgcggcag	gggctgaacc	gcgagcggct	gctgcgcgag	gaggactttg	14160
agccccgacgc	gcggacgggg	atcagccccg	cgcgcgcgca	cgtggcggcc	gccgacctgg	14220
tgacggcgta	cgagcagacg	gtgaaccagg	agatcaactt	ccaaaagagt	ttcaacaacc	14280
acgtgcgcac	gctggtggcg	cgcgaggagg	tgaccatcgg	gctgatgcac	ctgtgggact	14340
ttgtaagcg	gctggtgcag	aaccccaaca	gcaagcctct	gacggcgag	ctgttcctga	14400
tagtgcagca	cagcagggac	aacgaggcgt	ttagggacgc	gctgctgaac	atcaccgagc	14460
ccgagggtcg	gtggctgctg	gacctgatta	acatcctgca	gagcatagt	gtgcaggagc	14520
gcagcctgag	cctggccgac	aaggtggcgg	ccatcaacta	ctcgatgctg	agcctgggca	14580
agttttacgc	gcgcaagatc	taccagacgc	cgtacgtgcc	catagacaag	gaggtgaaga	14640
tcgacggttt	ttacatgcgc	atggcgctga	aggtgctcac	cctgagcgac	gacctgggcg	14700
tgtaccgcaa	cgagcgcatc	cacaaggccg	tgagcgtgag	ccggcggcg	gagctgagcg	14760
accgcgagct	gatgcacagc	ctgcagcggg	cgctggcggg	cgccggcagc	ggcgacaggg	14820
aggcggagtc	ctacttcgat	gcggggggcg	acctgcgctg	ggcgcccagc	cggcggggccc	14880
tggaggccgc	gggggtccgc	gaggactatg	acgaggacgg	cgaggaggat	gaggagtacg	14940
agctagagga	gggcgagtac	ctggactaaa	ccgcgggtgg	tgtttccggt	agatgcaaga	15000
cccgaacgtg	gtggacccgg	cgctgcgggc	ggctctgcag	agccagccgt	ccggccttaa	15060
ctcctcagac	gactggcgac	aggtcatgga	ccgcatcatg	tcgctgacgg	cgcgtaaccc	15120
ggacgcgttc	cggcagcagc	cgcaggccaa	caggctctcc	gccatcctgg	aggcgggtggt	15180
gcctgcgcgc	tcgaacccca	cgcacgagaa	ggtgctggcc	atagtgaacg	cgctggccga	15240
gaacagggcc	atccgcccgg	acgaggccgg	gctggtgtac	gacgcgctgc	tgacgcgcgt	15300
ggcccgtac	aacagcggca	acgtgcagac	caacctggac	cggctggtgg	gggacgtgcg	15360
cgaggcgggtg	gcgcagcgcg	agcgcgcgga	tcggcagggc	aacctgggct	ccatggtggc	15420
gctgaatgcc	ttcctgagca	cgcagccggc	caacgtgccg	cgggggcagg	aagactacac	15480
caactttgtg	agcgcgctgc	ggctgatggt	gaccgagacc	ccccagagcg	aggtgtacca	15540

gtcgggccccg gactacttct tccagaccag cagacagggc ctgcagacgg tgaacctgag	15600
ccaggctttc aagaacctgc gggggctgtg gggcgtgaag ggcgccaccg gcgaccgggc	15660
gacgggtgtcc agcctgctga cgcccaactc ggcctgctg ctgctgctga tcgcgccgtt	15720
cacggacagc ggcagcgtgt cccgggacac ctacctgggg cacctgctga ccctgtaccg	15780
cgaggccatc gggcaggcgc aggtggacga gcacaccttc caggagatca ccagcgtgag	15840
ccgcgcgctg gggcaggagg acacgagcag cctggaggcg actctgaact acctgctgac	15900
caaccggcgg cagaagattc cctcgtgca cagcctgacc tccgaggagg agcgcattct	15960
gcgctacgtg cagcagagcg tgagcctgaa cctgatgcgc gacgggggtga cgcccagcgt	16020
ggcgctggac atgaccgcgc gcaacatgga accgggcatg tacgccgcgc accggcctta	16080
catcaaccgc ctgatggact acctgcatcg cgcgcgggcc gtgaaccccg agtactttac	16140
caacgccatc ctgaacccgc actggctccc gccgccggg ttctacagcg ggggcttcga	16200
ggtcccgag accaacgatg gtttctgtg ggacgacatg gacgacagcg tgtttctccc	16260
gcggccgcag gcgctggcgg aagcgtccct gctgcgtccc aagaaggagg aggaggagga	16320
ggcgagtgc cgccgcggca gcagcggcgt ggcttctctg tccgagctgg gggcggcagc	16380
cgccgcgcgc cccgggtccc tgggcggcag cccctttccg agcctggtgg ggtctctgca	16440
cagcgagcgc accacccgcc ctcggctgct gggcgaggac gagtacctga ataactccct	16500
gctgcagccg gtgcgggaga aaaacctgcc tccgccttc cccaacaacg ggatagagag	16560
cctgggtggac aagatgagca gatggaagac ctatgcgcag gagcacaggg acgcgcctgc	16620
gctccggccg cccacgcggc gccagcgcca cgaccggcag cgggggctgg tgtgggatga	16680
cgaggactcc gcggacgata gcagcgtgct ggacctggga gggagcggca acccgttcgc	16740
gcacctgcgc cccgcctgg ggaggatgtt ttaaaaaaa aaaaaaang caagaagcat	16800
gatgcaaaaa ttaaataaaa ctcaccaagg ccatggcgac cgagcgttgg tttcttgtgt	16860
tcccttcagt atgcggcgcg cggcgatgta ccaggaggga cctcctccct cttacgagag	16920
cgtgggtgggc gcggcggcgg cggcgccctc ttctcccttt gcgtcgcagc tgctggagcc	16980
gccgtacgtg cctccgcgct acctgcggcc tacggggggg agaaacagca tccgttactc	17040
ggagctggcg cccctgttcg acaccacccg ggtgtacctg gtggacaaca agtcggcgga	17100
cgtggcctcc ctgaactacc agaacgacca cagcaatttt ttgaccacgg tcatccagaa	17160

caatgactac agccccgagcg aggccagcac ccagaccatc aatctggatg accggtcgca	17220
ctggggcggc gacctgaaaa ccatacctgca caccaacatg cccaacgtga acgagttcat	17280
gttcaccaat aagttcaagg cgcgggtgat ggtgtcgcgc tcgcacacca aggaagaccg	17340
ggtggagctg aagtacgagt ggggtgagtt cgagctgcca gagggcaact actccgagac	17400
catgaccatt gacctgatga acaacgcgat cgtggagcac tatctgaaag tgggcaggca	17460
gaacggggtc ctggagagcg acatcgggggt caagttcgac accaggaact tccgcctggg	17520
gctggacccc gtgaccgggc tggttatgcc cggggtgtac accaacgagg ctttccatcc	17580
cgacatcatc ctgctgcccc gctgcgggggt ggacttcact tacagccgcc tgagcaacct	17640
cctgggcatc cgcaagcggc agcccttcca ggagggttc aggatcacct acgaggacct	17700
ggaggggggc aacatccccg cgctcctcga tgtggaggcc taccaggata gcttgaagga	17760
aaatgaggcg ggacaggagg ataccgcccc cgccgcctcc gccgccgccg agcagggcga	17820
ggatgctgct gacaccgcgg ccgcggacgg ggcagaggcc gaccccgcta tgggtggtgga	17880
ggctccccgag caggaggagg acatgaatga cagtgcggtg cgcgagaca ctttcgtcac	17940
ccgggggggag gaaaagcaag cggaggccga ggccgcggcc gaggaaaagc aactggcggc	18000
agcagcggcg gcggcggcgt tggccgcggc ggaggctgag tctgagggga ccaagcccgc	18060
caaggagccc gtgattaagc ccctgaccga agatagcaag aagcgcagtt acaacctgct	18120
caaggacagc accaacaccg cgtaccgcag ctggtacctg gcctacaact acggcgaccc	18180
gtcgacgggg gtgcgctcct ggaccctgct gtgcacgccg gacgtgacct gcggctcgga	18240
gcaggtgtac tggtcgtgc ccgacatgat gcaagacccc gtgaccttcc gctccacgcg	18300
gcaggtcagc aacttcccgg tgggtgggcgc cgagctgctg cccgtgcact ccaagagctt	18360
ctacaacgac caggccgtct actcccagct catccgccag ttacactctc tgaccacgt	18420
gttcaatcgc tttcctgaga accagattct ggcgcgcccc cccgccccca ccatcaccac	18480
cgtcagtga aacgttcctg ctctcacaga tcacgggacg ctaccgctgc gcaacagcat	18540
cggaggagtc cagcgagtga ccgttactga cgccagacgc cgcacctgcc cctacgttta	18600
caaggccttg ggcatagtct cgccgcgcgt ctttccagc cgcacttttt gagcaacacc	18660
accatcatgt ccatacctgat ctcaccagc aataactccg gctggggact gctgcgcgcg	18720
cccagcaaga tgttcggagg ggcgaggaag cgttccgagc agcaccctgt gcgcgtgcgc	18780

gggcacttcc gcgccccctg gggagcgcac aaacgcggcc gcgcggggcg caccaccgtg	18840
gacgacgcca tcgactcggg ggtggagcag gcgcgcaact acaggcccgc ggtctctacc	18900
gtggacgcgg ccatccagac cgtgggtgcgg ggcgcgcggc ggtacgcaa gctgaagagc	18960
cgccggaagc gcgtggcccc cgcgccaccgc cgccgacccg gggccgccgc caaacgcgcc	19020
gccgcggccc tgcttcgccg ggccaagcgc acggggccgcc gcgccgccat gagggccgcg	19080
cgccgcttgg ccgccggcat caccgccgcc accatggccc cccgtacccg aagacgcgcg	19140
gccgccgccg ccgccgccgc catcagtac atggccagca ggccgccggg caacgtgtac	19200
tgggtgcgcg actcgggtac cggcacgcgc gtgcccgtgc gcttcgccc cccgcggact	19260
tgagatgatg tgaaaaaaca aactgagtc tcctgctgtt gtgtgtatcc cagcggcggc	19320
ggcgcgcgca gcgtcatgtc caagcgcaaa atcaaagaag agatgctcca ggtcgtcgcg	19380
ccggagatct atgggcccc gaagaaggaa gagcaggatt cgaagccccg caagataaag	19440
cgggtcaaaa agaaaaagaa agatgatgac gatgccgatg gggaggtgga gttcctgcgc	19500
gccacggcgc ccaggcggc ggtgcagtgg aaggccggc gcgtaaagcg cgtcctgcgc	19560
cccggcaccg cgggtggtctt cacgcccggc gagcgctcca cccggacttt caagcgcgtc	19620
tatgacgagg tgtacggcga cgaagacctg ctggagcagg ccaacgagcg cttcgagag	19680
tttgcttacg ggaagcgtca gcgggcgctg gggaaggagg acctgctggc gctgccgctg	19740
gaccagggca accccacccc cagtctgaag cccgtgacct tgcagcaggt gctgccgagc	19800
agcgcaccct ccgaggcgaa gcgggggtctg aagcgcgagg gcggcgacct ggcgccacc	19860
gtgcagctca tgggtgcccc gcggcagagg ctggaggatg tgctggagaa aatgaaagta	19920
gaccccggtc tgcagccgga catcagggtc cgccccatca agcaggtggc gccgggcctc	19980
ggcgtgcaga ccgtggacgt ggtcatcccc accggcaact ccccgccgc cgccaccact	20040
accgtgcct ccacggacat ggagacacag accgatcccg ccgcagccgc agccgcagcc	20100
gccgccgca cctcctcggc ggaggtgcag acggaccctt ggctgccgc gccgatgtca	20160
gctccccgcg cgcgtcgcgg gcgcaggaag tacggcgccg ccaacgcgct cctgcccag	20220
tacgccttgc atccttccat cgcgcccacc cccggctacc gaggtatac ctaccgccg	20280
cgaagagcca agggttccac ccgccgtccc cgccgacgcg ccgccgccac caccgcgcg	20340
cgccgccgca gacgccagcc cgcactggct ccagtctccg tgaggaaagt ggcgcgcgac	20400

ggacacaccc	tggtgctgcc	cagggcgcg	taccaccca	gcatcgttta	aaagcctgtt	20460
gtggttcttg	cagatatggc	cctcacttgc	cgctccgtt	tcccggtgcc	gggataccga	20520
ggaggaagat	cgcgccgcag	gaggggtctg	gccggccgcg	gcctgagcgg	aggcagccgc	20580
cgcgcgacc	ggcggcgacg	cgccaccagc	cgacgcatgc	gcggcggggt	gctgcccctg	20640
ttaatcccc	tgatcgccgc	ggcgatcggc	gccgtgccc	ggatcgctc	cgtggccttg	20700
caagcgtccc	agaggcattg	acagacttgc	aaacttgcaa	atatggaaaa	aaaaaccca	20760
ataaaaaagt	ctagactctc	acgctcgctt	ggctctgtga	ctattttgta	gaatggaaga	20820
catcaacttt	gcgtcgctgg	ccccgcgtca	cggtcgcgc	ccgttccttg	gacactggaa	20880
cgatatcggc	accagcaaca	tgagcgggtg	cgcttcagt	tggggctctc	tgtggagcgg	20940
cattaaaagt	atcgggtctg	ccgttaaaaa	ttacggctcc	cgggcctgga	acagcagcac	21000
gggccagatg	ttgagagaca	agttgaaaga	gcagaacttc	cagcagaagg	tggtggaggg	21060
cctggcctcc	ggcatcaacg	gggtggtgga	cctggccaac	caggccgtgc	agaataagat	21120
caacagcaga	ctggaccccc	ggccgccggt	ggaggaggtg	ccgccggcgc	tggagacggt	21180
gtccccgat	gggcgtggcg	agaagcgccc	gcggcccgat	agggaagaga	ccactctggt	21240
cacgcagacc	gatgagccgc	ccccgtatga	ggaggccctg	aagcaaggtc	tgccaccac	21300
gcggcccatc	gcgcccattg	ccaccggggt	ggtgggcccgc	cacacccccg	ccacgctgga	21360
cttgccctccg	cccgccgatg	tgccgcagca	gcagaaggcg	gcacagccgg	gcccgcgcgc	21420
gaccgcctcc	cgcttcctccg	ccggtcctct	gcgccgcgcg	gccagcggcc	cccgcggggg	21480
ggtcgcgagg	cacggcaact	ggcagagcac	gctgaacagc	atcgtgggtc	tgggggtgcg	21540
gtccgtgaag	cgccgccgat	gctactgaat	agcttagcta	acgtgttgta	tgtgtgtatg	21600
cgccctatgt	cgccgccaga	ggagctgctg	agtcgccgcc	gttcgcgcgc	ccaccaccac	21660
cgccactccg	cccctcaaga	tggcgacccc	atcgatgatg	ccgcagtggg	cgtacatgca	21720
catctcgggc	caggacgcct	cggagtacct	gagccccggg	ctggtgcagt	tcgcccgcgc	21780
caccgagagc	tacttcagcc	tgagtaacaa	gtttaggaac	cccacggtgg	cgcccacgca	21840
cgatgtgacc	accgaccggt	ctcagcgcct	gacgctgcgg	ttcattccc	tggaccgcga	21900
ggacaccgcg	tactcgtaca	aggcgcggtt	caccctggcc	gtgggcgaca	accgcgtgct	21960
ggacatggcc	tccacctact	ttgacatccg	cggggtgctg	gaccggggtc	ccactttcaa	22020

gccctactct	ggcaccgcct	acaactccct	ggcccccag	ggcgctcca	actcctgcga	22080
gtgggagcaa	gaggaaactc	aggcagttga	agaagcagca	gaagaggaag	aagaagatgc	22140
tgacgggtcaa	gctgaggaag	agcaagcagc	tacaaaaaag	actcatgtat	atgctcaggc	22200
tcccccttct	ggcgaaaaaa	ttagtaaaga	tggtctgcaa	ataggaacgg	acgctacagc	22260
tacagaacaa	aaacctatct	atgcagaccc	tacattccag	cccgaacccc	aaatcgggga	22320
gtcccagtgg	aatgaggcag	atgctacagt	cgccggcggt	agagtgctaa	agaaatctac	22380
tcccatgaaa	ccatgctatg	gttcctatgc	aagaccaca	aatgctaata	gaggtcaggg	22440
tgtactaacg	gcaaatgccc	agggacagct	agaatctcag	gttgaaatgc	aattcttttc	22500
aacttctgaa	aacgcccgtg	acgaggctaa	caacattcag	cccaaattgg	tgctgtatag	22560
tgaggatgtg	cacatggaga	ccccggatac	gcaccttctt	tacaagcccg	caaaaagcga	22620
tgacaattca	aaaatcatgc	tgggtcagca	gtccatgccc	aacagaccta	attacatcgg	22680
cttcagagac	aactttatcg	gcctcatgta	ttacaatagc	actggcaaca	tgggagtgtc	22740
tgcaggtcag	gcctctcagt	tgaatgcagt	ggtggacttg	caagacagaa	acacagaact	22800
gtcctaccag	ctcttgcttg	attccatggg	tgacagaacc	agatactttt	ccatgtggaa	22860
tcaggcagtg	gacagttatg	accagatgtg	tagaattatt	gaaaatcatg	gaactgaaga	22920
cgagctcccc	aactattggt	tccctctggg	tggcataggg	gtaactgaca	cttaccaggc	22980
tgttaaaacc	aacaatggca	ataacggggg	ccaggtgact	tggacaaaag	atgaaacttt	23040
tgcagatcgc	aatgaaatag	gggtgggaaa	caatttcgct	atggagatca	acctcagtgc	23100
caacctgtgg	agaaacttcc	tgtactccaa	cgtggcgctg	tacctaccag	acaagcttaa	23160
gtacaacccc	tccaatgtgg	acatctctga	caaccccaac	acctacgatt	acatgaacaa	23220
gcgagtgggtg	gccccggggc	tggtggactg	ctacatcaac	ctgggcgcgc	gctggtcgtc	23280
ggactacatg	gacaacgtca	acccttcaa	ccaccaccgc	aatgcggggc	tgcgctaccg	23340
ctccatgctc	ctgggcaacg	ggcgctacgt	gcccttcac	atccaggtgc	cccagaagtt	23400
ctttgccatc	aagaacctcc	tcctcctgcc	gggctcctac	acctacgagt	ggaacttcag	23460
gaaggatgtc	aacatggtcc	tccagagctc	tctgggtaac	gatctcaggg	tggacggggc	23520
cagcatcaag	ttcagagca	tctgcctcta	cgccaccttc	ttcccatgg	cccacaacac	23580
ggcctccacg	ctcaggcca	tgctcaggaa	cgacaccaac	gaccagtcct	tcaatgacta	23640

cctctccgcc gccaatgc tctaccccat acccgccaac gccaccaacg tccccatctc	23700
catcccctcg cgcaactggg cggccttccg cggctgggcc ttcacccgcc tcaagaccaa	23760
ggagaccccc tccctgggct cgggattcga cccctactac acctactcgg gctccattcc	23820
ctacctggac ggcaccttct acctcaacca cactttcaag aaggtctcgg tcaccttcga	23880
ctcctcggtc agctggccgg gcaacgaccg tctgctcacc cccaacgagt tcgagatcaa	23940
gcgctcggtc gacggggagg gctacaacgt ggcccagtg c aacatgacca aggactggtt	24000
cctgggtccag atgctggcca actacaacat cggctaccag ggcttctaca tcccagagag	24060
ctacaaggac aggatgtact ccttcttcag gaacttcag cccatgagcc ggcaggtggt	24120
ggaccagacc aagtacaagg actaccagga ggtgggcatc atccaccagc acaacaactc	24180
gggcttcgtg ggctacctcg cccccaccat gcgcgaggga caggcctacc ccgccaactt	24240
cccctatccg ctcataggca agaccgcggt cgacagcatc acccagaaaa agttcctctg	24300
cgaccgcacc ctctggcgca tccccttctc cagcaacttc atgtccatgg gtgcgctctc	24360
ggacctgggc cagaacttgc tctacgcaa ctccgccac gccctcgaca tgaccttcga	24420
ggtcgacccc atggacgagc ccacccttct ctatgttctg ttcgaagtct ttgacgtggt	24480
ccgggtccac cagccgcacc gcggcgcatc cgagaccgtg tacctgcgta cgcccttctc	24540
ggccggcaac gccaccacct aaagaagcaa gccgcagtca tcgccgcctg catgccgtcg	24600
ggttccaccg agcaagagct cagggccatc gtcagagacc tgggatgcgg gccctatttt	24660
ttgggcacct tcgacaagcg cttccctggc tttgtctccc cacacaagct ggcctgcgcc	24720
atcgtcaaca cggccggccg cgagaccggg ggcgtgcact ggctggcctt cgcctggaac	24780
ccgcgtcca aaacatgctt cctctttgac cccttcggct tttcggacca gcggctcaag	24840
caaatctacg agttcgagta cgagggcttg ctgcgtcgca gcgccatcg ctcctcgccc	24900
gaccgtgcg tcacctcga aaagtccacc cagaccgtgc aggggcccga ctcggccgcc	24960
tgcggtctct tctgctgcat gtttctgcac gcctttgtgc actggcctca gagtcccatg	25020
gaccgcaacc ccacatgaa cttgctgacg ggggtgcccc actccatgct ccagagcccc	25080
caggtcgagc ccacctgcg ccgcaaccag gagcagctct acagcttcct ggagcgccac	25140
tcgccttact tccgccgcca cagcgcacag atcaggaggg ccacctcctt ctgccacttg	25200
caagagatgc aagaagggtataacgatgt acacactttt tttctcaata aatggcatct	25260

ttttatttat	acaagctctc	tgggggtattc	atttcccacc	accacccgcc	gttgtcgcca	25320
tctggctcta	tttagaaatc	gaaaggggttc	tgccgggagt	cgccgtgcgc	cacgggcagg	25380
gacacgttgc	gatactggta	gcgggtgccc	cacttgaact	cgggcaccac	caggcgaggc	25440
agctcgggga	agttttcgct	ccacaggctg	cgggtcagca	ccagcgcgtt	catcaggtcg	25500
ggcgccgaga	tcttgaagtc	gcagttgggg	ccgccgccct	gcgcgcgcga	gttgcggtac	25560
accgggttgc	agcactggaa	caccaacagc	gccgggtgct	tcacgtggc	cagcacgctg	25620
cggtcggaga	tcagctcggc	gtccaggctc	tccgcgttgc	tcagcgcgaa	cggggtcatc	25680
ttgggcactt	gccgccccag	gaagggcgcg	tgccccggtt	tcagattgca	gtcgcagcgc	25740
agcgggatca	gcaggtgccc	gtgcccggac	tcggcggttg	ggtacagcgc	gcgcatgaag	25800
gcctgcatct	ggcggaaggc	catctgggcc	ttggcgccct	ccgagaagaa	catgccgcag	25860
gacttgcccc	agaactgggt	tgcggggcag	ctggcgctcg	gcaggcagca	gcgcgcgtcg	25920
gtgttggcga	tctgcaccac	gttgcgcccc	caccggttct	tcacgatctt	ggccttgac	25980
gattgctcct	tcagcgcgcg	ctgcccgttc	tcgctggtca	catccatctc	gatcacatgt	26040
tccttgttca	ccatgctgct	gccgtgcaga	cacttcagct	cgccctccgt	ctcggtgac	26100
cggtgctgcc	acagcgcgca	gcccgtgggc	tcgaaagact	tgtaggtcac	ctccgcgaag	26160
gactgcaggt	accctgcaa	aaagcggccc	atcatggtca	cgaaggtctt	gttgctgctg	26220
aaggtcagct	gcagcccgcg	gtgctcctcg	ttcagccagg	tcttgcacac	ggccgccagc	26280
gcctccacct	ggtcgggcag	catcttgaag	ttcaccttca	gctattctc	cacgtggtac	26340
ttgtccatca	gcgtgcgcgc	cgcctccatg	cccttctccc	aggccgacac	cagcggcagg	26400
ctcacgggggt	tcttcacat	caccgtggcc	gccgcctccg	ccgcgctttc	gctttccgcc	26460
ccgctgttct	cttcctcttc	ctcctcttcc	tcgccgccgc	ccactcgcag	ccccgcacc	26520
acggggctgt	cttcctgcag	gcgctgcacc	ttgcgcttgc	cgttgcgccc	ctgcttgatg	26580
cgcacgggcg	ggttgctgaa	gcccaccatc	accagcgcgg	cctcttcttg	ctcgtcctcg	26640
ctgtccagaa	tgacctccgg	ggaggggggg	ttggtcatcc	tcagtaccga	ggcacgcttc	26700
tttttcttcc	tgggggcgtt	cgccagctcc	gcggctgcgg	ccgctgccga	ggtcgaaggc	26760
cgagggtg	gcgtgcgcgg	caccagcgcg	tcctgcgagc	cgtcctcgtc	ctcctcgac	26820
tcgagacgga	ggcgggcccc	cttcttcggg	ggcgcgcggg	gcggcgagg	cggcggcggc	26880

gacggagacg gggacgagac atcgtccagg gtgggtggac ggcgggccgc gccgcgtccg	26940
cgctcggggg tggctctcgc ctggtcctct tcccgaactgg ccatctccca ctgctccttc	27000
tcctataggc agaaagagat catggagtct ctcatgcgag tcgagaagga ggaggacagc	27060
ctaaccgccc cctctgagcc ctccaccacc gccgccacca ccgccaatgc cgccgcggac	27120
gacgcgccc aagagaccac cgccagtacc accctcccca gcgacgcacc cccgctcgag	27180
aatgaagtgc tgatcgagca ggacccgggt tttgtgagcg gagaggagga tgaggtggat	27240
gagaaggaga aggaggaggt cgccgcctca gtgccaaaag aggataaaaa gcaagaccag	27300
gacgacgcag ataaggatga gacagcagtc gggcggggga acggaagcca tgatgctgat	27360
gacggctacc tagacgtggg agacgacgtg ctgcttaagc acctgcaccg ccagtgcgtc	27420
atcgtctgcg acgcgctgca ggagcgctgc gaagtgcccc tggacgtggc ggaggtcagc	27480
cgcgcttacg agcggcacct cttcgcgccg cacgtgcccc ccaagcgccg ggagaacggc	27540
acctgcgagc ccaaccgcg tctcaacttc taccgggtct tcgcggtacc cgaggtgctg	27600
gccacctacc acatcttttt caaaactgc aagatcccc tctcctgccg cgccaaccgc	27660
acccgcgccg acaaaacctt gaccctgcgg cagggcgccc acatacctga tatcgctct	27720
ctggaggaag tgcccaagat cttcgagggt ctcggtcgcg acgagaaacg ggcggcgaac	27780
gctctgcacg gagacagcga aaacgagagt cactcggggg tgctggtgga gctcgagggc	27840
gacaacgcgc gcctggccgt actcaagcgc agcatagagg tcaccactt tgcctaccgc	27900
gcgctcaacc tgcccccaa ggtcatgagt gtggtcatgg gcgagctcat catgcgccgc	27960
gcccagcccc tggccgcgga tgcaaaactg caagagtcct ccgaggaagg cctgcccgcg	28020
gtcagcgacg agcagctggc gcgctggctg gagaccgcg accccgcgca gctggaggag	28080
cggcgcaagc tcatgatggc cgcggtgctg gtcaccgtgg agctcgagtg tctgcagcgc	28140
ttcttcgcgg accccgagat gcagcgcaag ctcgaggaga ccctgcacta caccttccgc	28200
cagggtctacg tgcgccaggc ctgcaagatc tccaacgtgg agctctgcaa cctggtctcc	28260
tacctgggca tcctgcacga gaaccgcctc gggcagaacg tcctgcactc caccctcaaa	28320
ggggaggcgc gccgcgacta catccgcgac tgcgcctacc tcttcctctg ctacacctgg	28380
cagacggcca tgggggtctg gcagcagtcg ctggaggagc gcaacctcaa ggagctggaa	28440
aagctcctca agcgcaccct cagggacctc tggacgggt tcaacgagcg ctcggtggcc	28500

gccgcgctgg	cggacatcat	ctttcccgag	cgctgtctca	agaccctgca	gcagggcctg	28560
cccgacttca	ccagccagag	catgctgcag	aacttcagga	ctttcatcct	ggagcgctcg	28620
ggcatcctgc	cggccacttg	ctgcgcgctg	cccagcgact	tcgtgcccac	caagtacagg	28680
gagtggccgc	cgccgctctg	gggccactgc	tacctcttcc	agctggccaa	ctacctcgcc	28740
taccactcgg	acctcatgga	agacgtgagc	ggcgagggcc	tgctcgagtg	ccactgccgc	28800
tgcaacctct	gcacgcccc	ccgctctcta	gtctgcaacc	cgagctgct	cagcgagagt	28860
cagattatcg	gtaccttca	gctgcagggt	ccctcgctg	acgagaagtc	cgcggtcca	28920
gggctgaaac	tcactccggg	gctgtggact	tccgcctacc	tacgcaaatt	tgtacctgag	28980
gactaccacg	cccacgagat	caggttctac	gaagaccaat	ccgcccgc	caaggcggag	29040
ctcaccgcct	gcgtcatcac	ccaggggcac	atcctgggcc	aattgcaagc	catcaacaaa	29100
gcccggcgag	agttcttgct	gaaaaagggt	cggggggtgt	acctggaccc	ccagtccggc	29160
gaggagctaa	acccgctacc	cccgccgcg	ccccagcagc	gggaccttgc	ttcccaggat	29220
ggcaccacga	aagaagcagc	agccgccgc	gccgccgcag	ccatacatgc	ttctggagga	29280
agaggaggag	gactgggaca	gtcaggcaga	ggaggtttcg	gacgaggagc	aggaggagat	29340
gatggaagac	tgggaggagg	acagcagcct	agacaggaga	gcttcagagg	ccgaagagggt	29400
ggcagacgca	acaccatcgc	cctcggtcgc	agccccctcg	ccggggcccc	tgaaatcctc	29460
cgaaccacgc	accagcgcta	taacctccgc	tcctccggcg	ccggcgccac	ccgcccgcag	29520
acccaaccgt	agatgggaca	ccacaggaac	cggggtcggt	aagtccaagt	gcccgccgc	29580
gccaccgcag	cagcagcagc	agcagcgcca	gggctaccgc	tcgtggcgcg	ggcacaagaa	29640
cgccatagtc	gcctgcttgc	aagactgcgg	gggcaacatc	tctttcgccc	gccgcttcct	29700
gctattccac	cacggggtcg	cctttccccg	caatgtcctg	cattactacc	gtcatctcta	29760
cagcccctac	tgacgcggcg	accagaggc	ggcagcgga	gccacagcgg	cgaccaccac	29820
ctaggaagat	atcctccgcg	ggcaagacag	cggcagcagc	ggccaggaga	cccgcggcag	29880
cagcggcggg	agcgggtgggc	gactgcgcc	tctcgcccaa	cgaaccctc	tcgaccggg	29940
agctcagaca	caggatcttc	cccactttgt	atgccatctt	ccaacagagc	agaggccagg	30000
agcaggagct	gaaaataaaa	aacagatctc	tgcgctccct	caccgcagc	tgtctgtatc	30060
acaaaagcga	agatcagctt	cggcgcacgc	tggaggacgc	ggaggcactc	ttcagcaaat	30120

actgcgcgct cactcttaaa gactagctcc gcgcccttct cgaatttagg cgggagaaaa	30180
ctacgtcatc gccggccgcc gccagcccg cccagccgag atgagcaaag agattcccac	30240
gccatacatg tggagctacc agccgcagat gggactcgcg gcgggagcgg cccaggacta	30300
ctccacccgc atgaactaca tgagcgcggg accccacatg atctcacagg tcaacgggat	30360
ccgcgcccag cgaaaccaa tactgctgga acaggcggcc atcaccgcca cgccccgcca	30420
taatctcaac ccccgaaatt ggcccgccgc cctcgtgtac caggaaacc cctccgccac	30480
caccgtacta cttccgcgtg acgcccaggc cgaagtccag atgactaact caggggcgca	30540
gctcgcgggc ggctttcgtc acggggcgcg gccgctccga ccaggtataa gacacctgat	30600
gatcagaggc cgaggtatcc agctcaacga cgagtcggtg agctcttcgc tcggtctccg	30660
tccggacgga actttccagc tcgccggatc cggccgctct tcgttcacgc cccgccaggc	30720
gtacctgact ctgcagacct cgtcctcgga gcccgcctcc ggcggcatcg gaaccctcca	30780
gttcgtggag gagttcgtgc cctcggctta cttcaacccc ttctcgggac ctcccggacg	30840
ctaccccgac cagttcattc cgaactttga cgcggtgaag gactcggcgg acggctacga	30900
ctgaatgtca ggtgtcgagg cagagcagct tcgcctgaga cacctcgagc actgccgccg	30960
ccacaagtgc ttcgcccgcg gttctggtga gttctgtac tttagctac ccgaggagca	31020
taccgagggg ccggcgcacg gcgtccgcct gaccaccag ggcgaggtta cctgttcctt	31080
catccgggag tttaccctcc gtcccctgct agtggagcgg gagcggggtc cctgtgtcct	31140
aactatcgcc tgcaactgcc ctaaccctgg attacatcaa gatctttgct gtcattcttg	31200
tgctgagttt aataaacgct gagatcagaa tctactggga tttagtcccc tttaactaat	31260
caaacactgg aatcaataaa aagaatcact tacttaaaat cagacagcag gtctctgtcc	31320
agtttattca gcagcacctc cttcccctcc tcccaactct ggtactccaa acgccttctg	31380
gcggcaaact tcctccacac cctgaaggga atgtcagatt cttgctcctg tccctccgca	31440
cccactatct tcatgttggt gcagatgaag cgcacaaaaa cgtctgacga gagcttcaac	31500
cccgtgtacc cctatgacac ggaaagcggc cctccctccg tccctttcct caccctccc	31560
ttcgtgtctc ccgatggatt ccaagaaagt cccccgggg tcctgtctct gaacctggcc	31620
gagcccctgg tcacttcca cggcatgctc gccctgaaaa tgggaagtgg cctctccctg	31680
gacgacgctg gcaacctcac ctctcaagat atcaccaccg ctagccctcc cctcaaaaaa	31740

accaagacca	acctcagcct	agaaacctca	tcccccttaa	ctgtgagcac	ctcaggcgcc	31800
ctcaccgtag	cagccgccgc	tcccctggcg	gtggccggca	cctccctcac	catgcaatca	31860
gaggccccc	tgacagtaca	ggatgcaaaa	ctcaccctgg	ccaccaaagg	ccccctgacc	31920
gtgtctgaag	gcaaaactggc	cttgcaaaca	tcggccccgc	tgacggccgc	tgacagcagc	31980
accctcacag	tcagtgccac	accacccctt	agcacaagca	atggcagctt	gggtattgac	32040
atgcaagccc	ccatttacac	caccaatgga	aaactaggac	ttaacttttg	cgctcccctg	32100
catgtggtag	acagcctaaa	tgcactgact	gtagttactg	gccaaggtct	tacgataaac	32160
ggaacagccc	tacaaactag	agtctcaggt	gccctcaact	atgacacatc	aggaaaccta	32220
gaattgagag	ctgcaggggg	tatgcgagtt	gatgcaaatg	gtcaacttat	ccttgatgta	32280
gcttaccat	ttgatgcaca	aaacaatctc	agccttaggc	ttggacaggg	accctgttt	32340
gttaactctg	cccacaactt	ggatgttaac	tacaacagag	gcctctacct	gttcacatct	32400
ggaaatacca	aaaagctaga	agttaatatc	aaaacagcca	agggtctcat	ttatgatgac	32460
actgctatag	caatcaatgc	gggtgatggg	ctacagtttg	actcaggctc	agatacaaat	32520
ccattaaaaa	ctaaacttgg	attaggactg	gattatgact	ccagcagagc	cataattgct	32580
aaactgggaa	ctggcctaag	ctttgacaac	acaggtgcca	tcacagtagg	caacaaaaat	32640
gatgacaagc	ttaccttgtg	gaccacacca	gacccatccc	ctaactgtag	aatctattca	32700
gagaaagatg	ctaaattcac	acttgttttg	actaaatgcg	gcagtcaggt	gttggccagc	32760
gtttctgttt	tatctgtaaa	aggtagcctt	gcgcccata	gtggcacagt	aactagtgtc	32820
cagattgtcc	tcagatttga	tgaaaatgga	gttctactaa	gcaattcttc	ccttgaccct	32880
caatactgga	actacagaaa	aggtgacctt	acagagggca	ctgcatatac	caacgcagtg	32940
ggatttatgc	ccaacctcac	agcataccca	aaaacacaga	gccaaactgc	taaaagcaac	33000
attgtaagtc	aggtttactt	gaatggggac	aaatccaaac	ccatgaccct	caccattacc	33060
ctcaatggaa	ctaatgaaac	aggagatgcc	acagtaagca	cttactccat	gtcatttctca	33120
tggaactgga	atggaagtaa	ttacattaat	gaaacgttcc	aaaccaactc	cttcaccttc	33180
tcctacatcg	ccaagaata	aaaagcatga	cgctgttgat	ttgattcaat	gtgtttctgt	33240
tttattttca	agcacaacaa	aatcattcaa	gtcattcttc	catcttagct	taatagacac	33300
agtagcttaa	tagaccagct	agtgcaaagc	cccattctag	cttataacta	gtggagaagt	33360

actgcctac atgggggtag agtcataatc gtgcatcagg atagggcggt ggtgctgcag	33420
cagcgcgcga ataaactgct gccgccgccg ctccgtcctg caggaatata acatggcagt	33480
ggtctcctca gcgatgattc gcaccgcccc cagcataagg cgccttgtcc tccgggcaca	33540
gcagcgcacc ctgatctcac ttaaatacagc acagtaactg cagcacagca ccacaatatt	33600
gttcaaaatc ccacagtgcaggcgtgta tccaaagctc atggcgggga ccacagaacc	33660
cacgtggcca tcataccaca agcgcaggta gattaagtgg cgaccctca taaacacgct	33720
ggacataaac attacctctt ttggcatgtt gtaattcacc acctcccgtt accatataaa	33780
cctctgatta aacatggcgc catccaccac catcctaaac cagctggcca aaacctgccc	33840
gccggctata cactgcaggg aaccgggact ggaacaatga cagtggagag cccaggactc	33900
gtaaccatgg atcatcatgc tcgtcatgat atcaatgttg gcacaacaca ggcacacgtg	33960
catacacttc ctgaggatta caagctcctc ccgcgttaga accatatccc aggggaacaac	34020
ccattcctga atcagcgtaa atcccacact gcagggaaga cctcgcacgt aactcacgtt	34080
gtgcattgtc aaagtgttac attcgggcag cagcggatga tcctccagta tggtagcgcg	34140
ggtttctgtc tcaaaaggag gtagacgatc cctactgtac ggagtgcgcc gagacaaccg	34200
agatcgtgtt ggtcgtagtgc tcatgccaaa tggaacgccg gacgtagtca tatttcctga	34260
agtcttagat ctctcaacgc agcaccagca ccaacacttc gcagtgtaaa aggccaagtgc	34320
ccgagagagt atatataagga ataaaaagtgc acgtaaacgg gcaaagtcca aaaaacgccc	34380
agaaaaaccg cacgcgaacc tacgccccga aacgaaagcc aaaaaacact agacactccc	34440
ttccggcgct aacttccgct ttcccacgct acgtcacttg cccagtcac acaaactaca	34500
tatcccgaac ttccaagtgc ccacgccaa aacaccgcct acacctcccc gcccgccggc	34560
ccgcccccaa acccgctctc cgccccgcgc cccgccccgc gccgcccac tcattatcat	34620
attggcttca atccaaaata aggtatatta ttgatgatgg tttaaacgga tcctctagag	34680
tcgacctgca ggcatgcaag cttgagtatt ctatagtgtc acctaaatag cttggcgtaa	34740
tcatggctcat agctgtttcc tgtgtgaaat tgttatccgc tcacaattcc acacaacata	34800
cgagccggaa gcataaagtgc taaagcctgg ggtgcctaata gagtgagcta actcacatta	34860
attgcgttgc gctcactgcc cgctttccag tcgggaaacc tgtcgtgcca gctgcattaa	34920
tgaatcggcc aacgcgaacc cttgcggcc gcccgggccg tcgaccaatt ctcatgtttg	34980

acagcttatc atcgaatttc tgccattcat ccgcttatta tcacttattc agctcggtag	35040
ccgggggatcc tcgttttaaac aggcgtagca accaggcggt taagggcacc aataactgcc	35100
ttaaaaaaat tacgccccgc cctgccactc atcgcagtag tgttgtaatt cattaagcat	35160
tctgccgaca tggaagccat cacaaacggc atgatgaacc tgaatcgcca gcggcatcag	35220
caccttgctg ccttgctgat aatatttgcc catggtgaaa acgggggcga agaagttgtc	35280
catattggcc acgttttaaat caaaactggg gaaactcacc cagggtattg ctgagacgaa	35340
aaacatattc tcaataaacc ctttagggaa ataggccagg ttttcaccgt aacacgccac	35400
atcttgcgaa tatatgtgta gaaactgccg gaaatcgtag tggatttcac tccagagcga	35460
tgaaaacggt tcagtttgct catggaaaac ggtgtaacaa ggggtgaacac tatcccatat	35520
caccagctca ccgtctttca ttgccatacg gaattccgga tgagcattca tcaggcgggc	35580
aagaatgtga ataaaggccg gataaaactt gtgcttattt ttctttacgg tctttaaaaa	35640
ggccgtaata tccagctgaa cggctctggt ataggtacat tgagcaactg actgaaatgc	35700
ctcaaaatgt tctttacgat gccattggga tatatcaacg gtggtatatc cagtgtttt	35760
tttctccatt ttagcttcct tagctcctga aaatctcgat aactcaaaaa atacgcccg	35820
tagtgatctt atttcattat ggtgaaagtt ggaacctctt acgtgccgat caacgtctca	35880
ttttcgccaa aagttggccc agggcttccc ggtatcaaca gggacaccag gatttattta	35940
ttctgcgaag tgatcttccg tcacaggtat ttattcgca taagctcatg gagcggcgta	36000
accgtcgcac aggaaggaca gagaaagcgc ggatctggga agtgacggac agaacggtca	36060
ggacctggat tggggaggcg gttgccgccg ctgctgctga cgggtgtgac ttctctgttc	36120
cggtcacacc acatacgttc cgccattcct atgcgatgca catgctgtat gccggtatac	36180
cgctgaaagt tctgcaaagc ctgatgggac ataagtccat cagttcaacg gaagtctaca	36240
cgaaggtttt tgcgctggat gtggctgccc ggcaccgggt gcagtttgcg atgccggagt	36300
ctgatgcggt tgcgatgctg aaacaattat cctgagaata aatgccttg cttttatatg	36360
gaaatgtgga actgagtgga tatgctgttt ttgtctgtta aacagagaag ctggctgtta	36420
tccactgaga agcgaacgaa acagtcggga aaatctccca ttatcgtaga gatccgcatt	36480
attaatctca ggagcctgtg tagcgtttat aggaagtagt gttctgtcat gatgcctgca	36540
agcggtaacg aaaacgattt gaatatgcct tcaggaacaa tagaaatctt cgtgcggtgt	36600

tacgttgaag tggagcggat tatgtcagca atggacagaa caacctaatag aacacagaac	36660
catgatgtgg tctgtccttt tacagccagt agtgctcgcc gcagtcgagc gacagggcgga	36720
agccctcgag tgagcgagga agcaccaggg aacagcactt atatatcttg cttacacacg	36780
atgcctgaaa aaacttcctt tgggggttatc cacttatcca cggggatatt ttataatta	36840
ttttttttat agtttttaga tcttcttttt tagagcgctt tgtaggcctt tatccatgct	36900
ggttctagag aagggtgtgt gacaaattgc cttttcagt tgacaaatca ccctcaaata	36960
acagtcctgt ctgtgacaaa ttgcccttaa ccctgtgaca aattgccctc agaagaagct	37020
gttttttcac aaagttatcc ctgcttattg actctttttt atttagtgtg acaatctaaa	37080
aacttgtcac acttcacatg gatctgtcat ggcggaaaca gcggttatca atcacaagaa	37140
acgtaaaaaat agcccgcgaa tcgtccagtc aaacgacctc actgaggcgg catatagtct	37200
ctcccgggat caaaaacgta tgctgtatct gttcgttgac cagatcagaa aatctgatgg	37260
caccctacag gaacatgacg gtatctgcga gatccatgtt gctaaatatg ctgaaatatt	37320
cggattgacc tctgcggaag ccagtaagga tatacggcag gcattgaaga gtttcgcggg	37380
gaaggaagtg gttttttatc gccctgaaga ggatgccggc gatgaaaaag gctatgaatc	37440
ttttccttgg tttatcaaac gtgcgcacag tccatccaga gggctttaca gtgtacatat	37500
caaccctat ctcatccct tctttatcgg gttacagaac cggttttacgc agtttcggct	37560
tagtgaaaca aaagaaatca ccaatccgta tgccatgcgt ttatacgaat ccctgtgtca	37620
gtatcgtaag ccggatggct caggcatcgt ctctctgaaa atcgactgga tcatagagcg	37680
ttaccagctg cctcaaagtt accagcgtat gcctgacttc cgccgccgct tcctgcaggt	37740
ctgtgttaat gagatcaaca gcagaactcc aatgcgcctc tcatacattg agaaaaagaa	37800
aggccgccag acgactcata tcgtattttc cttccgcgat atcacttcca tgacgacagg	37860
atagtctgag ggttatctgt cacagatttg aggggtggtt gtcacatttg ttctgacct	37920
ctgagggtaa tttgtcacag ttttgctgtt tccttcagcc tgcatggatt ttctcatact	37980
ttttgaactg taatttttaa ggaagccaaa tttgagggca gtttgtcaca gttgatttcc	38040
ttctctttcc cttcgtcatg tgacctgata tcgggggtta gttcgtcatc attgatgagg	38100
gttgattatc acagtttatt actctgaatt ggctatccgc gtgtgtacct ctacctggag	38160
ttttcccac ggtggatatt tcttcttgcg ctgagcgtaa gagctatctg acagaacagt	38220

tcttctttgc	ttcctcgcca	gttcgctcgc	tatgctcggc	tacacggctg	cggcgagcgc	38280
tagtgataat	aagtgactga	ggtatgtgct	cttcttatct	cctttttag	tgttgctctt	38340
attttaaaca	actttgcggt	tttttgatga	ctttgcgatt	ttgttggtgc	tttgcagtaa	38400
attgcaagat	ttaataaaaa	aacgcaaagc	aatgattaaa	ggatgttcag	aatgaaactc	38460
atggaaacac	ttaaccagt	cataaacgct	ggcatgaaa	tgacgaaggc	tatcgccatt	38520
gcacagttaa	atgatgacag	cccggaagcg	aggaaaataa	cccggcgctg	gagaataggt	38580
gaagcagcgg	atttagttgg	ggtttcttct	caggctatca	gagatgccga	gaaagcaggg	38640
cgactaccgc	acccggatat	ggaaattcga	ggacgggttg	agcaacgtgt	tggttataca	38700
attgaacaaa	ttaatcatat	gcgtgatgtg	tttggtacgc	gattgcgacg	tgctgaagac	38760
gtatttccac	cggtgatcgg	ggttgctgcc	cataaagggt	gcgtttacaa	aacctcagtt	38820
tctgttcac	ttgctcagga	tctggctctg	aaggggctac	gtgttttgct	cgtggaaggt	38880
aacgaccccc	agggaacagc	ctcaatgtat	cacggatggg	taccagatct	tcataattcat	38940
gcagaagaca	ctctcctgcc	tttctatctt	ggggaaaagg	acgatgtcac	ttatgcaata	39000
aagcccactt	gctggccggg	gcttgacatt	attccttcct	gtctggctct	gcaccgtatt	39060
gaaactgagt	taatgggcaa	atttgatgaa	ggtaaactgc	ccaccgatcc	acacctgatg	39120
ctccgactgg	ccattgaaac	tggtgctcat	gactatgatg	tcatagttat	tgacagcgcg	39180
cctaacctgg	gtatcggcac	gattaatgtc	gtatgtgctg	ctgatgtgct	gattgttccc	39240
acgcctgctg	agttgtttga	ctacacctcc	gcactgcagt	ttttcgatat	gcttcgtgat	39300
ctgctcaaga	acgttgatct	taaagggttc	gagcctgatg	tacgtatttt	gcttaccaaa	39360
tacagcaata	gtaatggctc	tcagtccccg	tggatggagg	agcaaattcg	ggatgcctgg	39420
ggaagcatgg	ttctaataaa	tggtgtacgt	gaaacggatg	aagttggtaa	aggtcagatc	39480
cggatgagaa	ctgtttttga	acaggccatt	gatcaacgct	cttcaactgg	tgcttgagaa	39540
aatgctcttt	ctatttggga	acctgtctgc	aatgaaattt	tcgatcgtct	gattaaacca	39600
cgctgggaga	ttagataatg	aagcgtgcgc	ctgttattcc	aaaacatacg	ctcaatactc	39660
aaccggttga	agatacttcg	ttatcgacac	cagctgcccc	gatgggtggat	tcgttaattg	39720
cgcgcgtagg	agtaatggct	cgcggtaatg	ccattacttt	gcctgtatgt	ggtcgggatg	39780
tgaagtttac	tcttgaagt	ctccggggtg	atagtgttga	gaagacctct	cgggtatggt	39840

caggtaatga acgtgaccag gagctgctta ctgaggacgc actggatgat ctcatccctt	39900
cttttctact gactgggtcaa cagacaccgg cgttcggtcg aagagtatct ggtgtcatag	39960
aaattgccga tgggagtcgc cgtcgtaaag ctgctgcact taccgaaagt gattatcgtg	40020
ttctggttgg cgagctggat gatgagcaga tggctgcatt atccagattg ggtaacgatt	40080
atcgcccaac aagtgccttat gaacgtggtc agcgttatgc aagccgattg cagaatgaat	40140
ttgctggaaa tatttctgcg ctggctgatg cggaaaatat ttcacgtaag attattaccc	40200
gctgtatcaa caccgccaaa ttgcctaaat cagttgttgc tcttttttct caccggtg	40260
aactatctgc ccggtcaggt gatgcacttc aaaaagcctt tacagataaa gaggaattac	40320
ttaagcagca ggcattctaac cttcatgagc agaaaaaagc tgggggtgata tttgaagctg	40380
aagaagttat cactctttta acttctgtgc ttaaaacgtc atctgcatca agaactagtt	40440
taagctcacg acatcagttt gctcctggag cgacagtatt gtataagggc gataaaatgg	40500
tgcttaacct ggacaggtct cgtgttccaa ctgagtgtat agagaaaatt gaggccattc	40560
ttaaggaact tgaaaagcca gcaccctgat gcgaccacgt tttagtctac gtttatctgt	40620
ctttacttaa tgtcctttgt tacaggccag aaagcataac tggcctgaat attctctctg	40680
ggcccactgt tccacttgta tcgtcggctc gataatcaga ctgggaccac ggtcccactc	40740
gtatcgtcgg tctgattatt agtctgggac cacgggtcca ctcgtatcgt cggtctgatt	40800
attagtctgg gaccacggtc ccactcgtat cgtcggctctg ataatacagac tgggaccacg	40860
gtcccactcg tatcgtcgggt ctgattatta gtctgggacc atggtccac tcgtatcgtc	40920
ggtctgatta ttagtctggg accacgggtc cactcgtatc gtcggctctga ttattagtct	40980
ggaaccacgg tcccactcgt atcgtcggtc tgattattag tctgggacca cggtcccact	41040
cgtatcgtcg gtctgattat tagtctggga ccacgatccc actcgtgttg tcggtctgat	41100
tatcggctcg ggaccacggt ccacttgta ttgtcgatca gactatcagc gtgagactac	41160
gattccatca atgcctgtca agggcaagta ttgacatgtc gtcgtaacct gtagaacgga	41220
gtaacctcgg tgtgcggttg tatgcctgct gtggattgct gctgtgtcct gcttatccac	41280
aacattttgc gcacggttat gtggacaaaa tacctggtta cccaggccgt gccggcacgt	41340
taaccgggct gcatccgatg caagtgtgtc gctgtcgacg agctcgcgag ctcggacatg	41400
aggttgcccc gtattcagtg tcgctgattt gtattgtctg aagttgtttt tacgttaagt	41460

tgatgcagat caattaatac gatacctgcg tcataattga ttatttgacg tggtttgatg	41520
gcctccacgc acgttgtgat atgtagatga taatcattat cactttacgg gtcctttccg	41580
gtgatccgac aggttacggg gcggcgacct cgcggggttt cgctatttat gaaaattttc	41640
cggtttaagg cgtttccgtt cttcttcgtc ataacttaat gtttttattt aaaataccct	41700
ctgaaaagaa aggaaacgac aggtgctgaa agcgagcttt ttggcctctg tcgtttcctt	41760
tctctgtttt tgtccgtgga atgaacaatg gaagtccgag ctcacgcta ataacttcgt	41820
atagcataca ttatacgaag ttatattcga tgcggccgca aggggttcgc gtcagcgggt	41880
gttggcgggt gtcggggctg gcttaactat gcggcatcag agcagattgt actgagagtg	41940
caccatatgc ggtgtgaaat accgcacaga tgcgtaagga gaaaataccg catcaggcgc	42000
cattcgccat tcaggctgcg caactgttgg gaaggcgat cgggtcgggc ctcttcgcta	42060
ttacgccagc tggcgaaagg gggatgtgct gcaaggcgat taagttgggt aacgccaggg	42120
ttttcccagt cacgacgttg taaaacgacg gccagtgaat tgtaatacga ctcactatag	42180
ggcgaattcg agctcggtac ccggggatcc tcgtttaaac	42220