

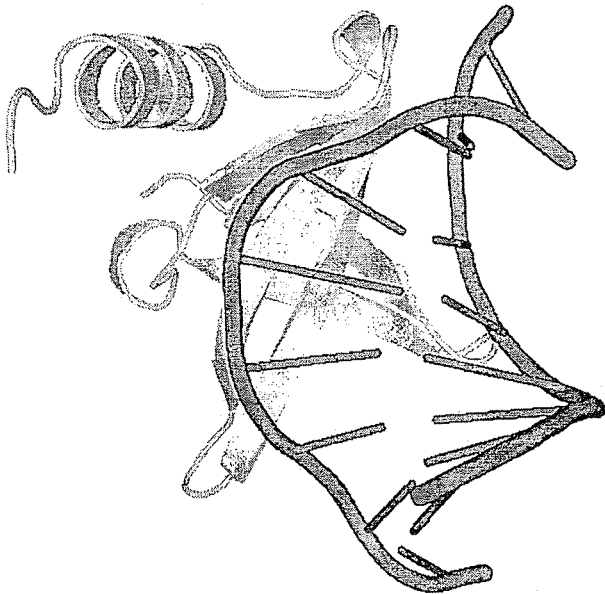


Figure 1a

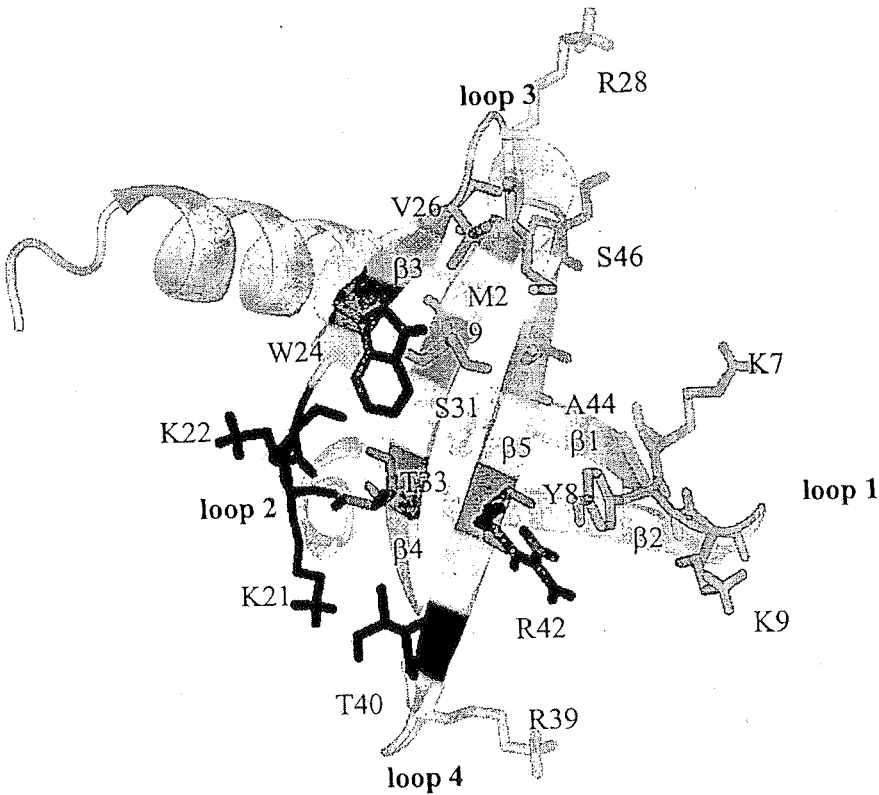


Figure 1b

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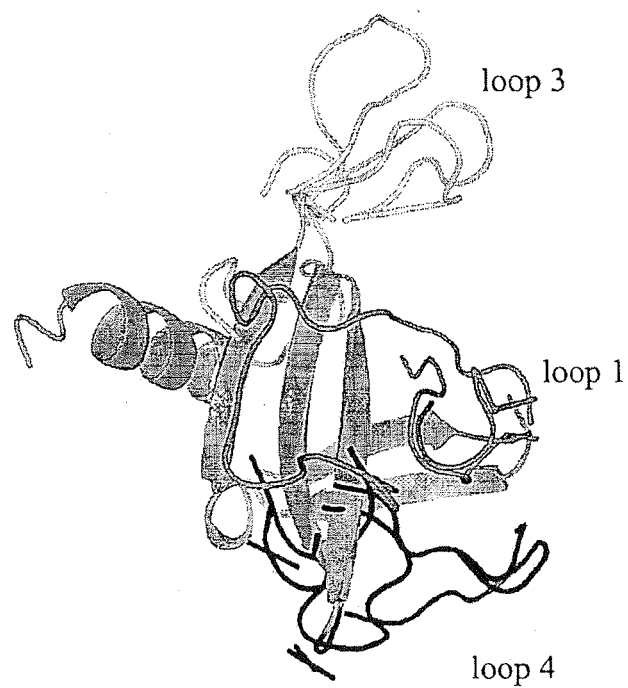
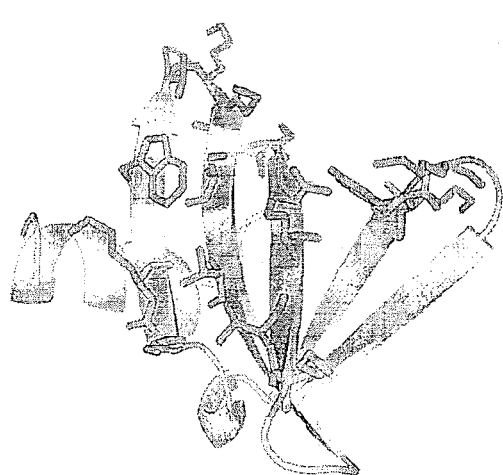
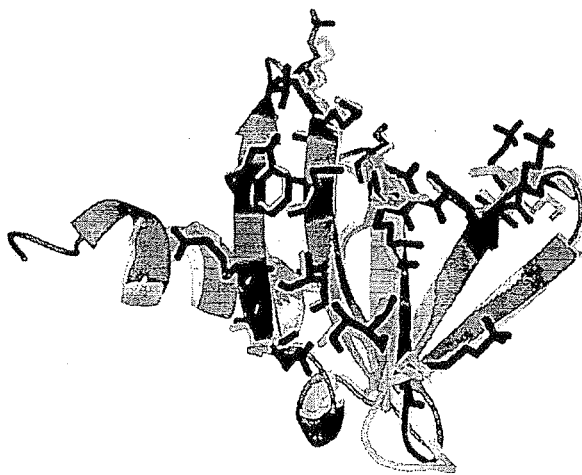


Figure 2



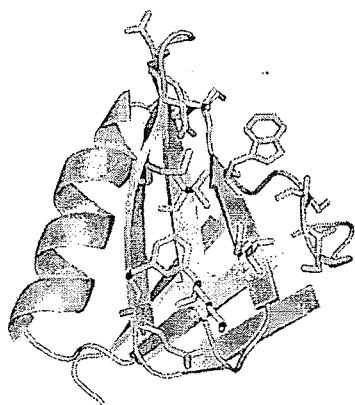
Sso7d



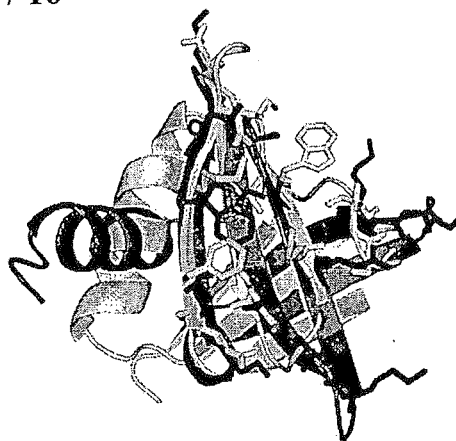
Superomposition with Sac7d

Figure 3a

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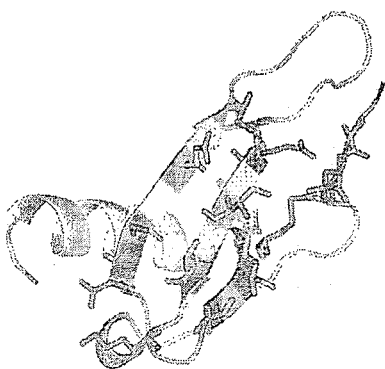


Shiga-like toxin IIe

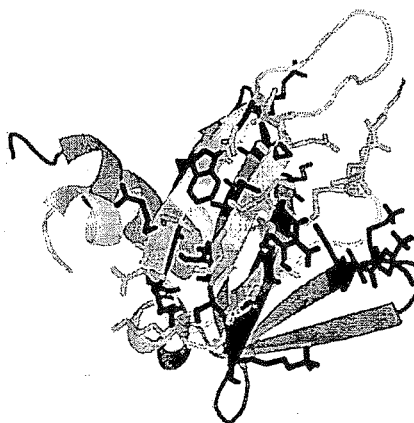


Superimposition with Sac7d

Figure 3b

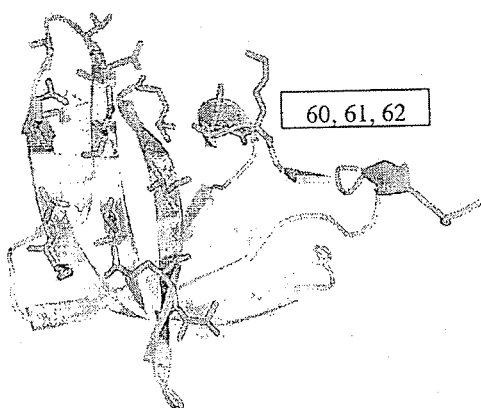


NAP-2

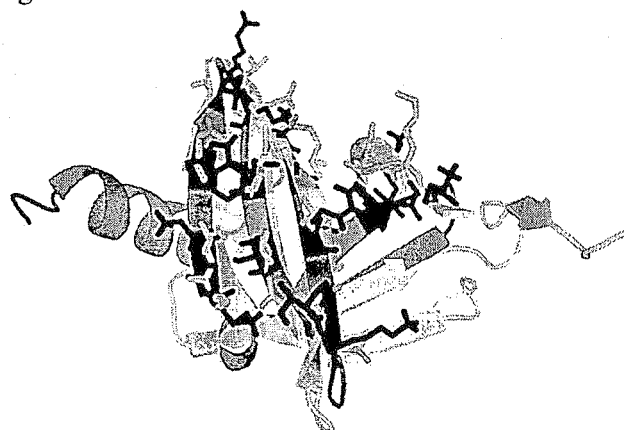


Superimposition with Sac7d

Figure 3c



modg



Superimposition with Sac7d

Figure 3d

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Sac7d	VKVFKYKGEKEVDTSKIKKVVRVGKMSFTYDDNGKTGRGAVSEKDAPKELLDMLARAERE-KK
Sac7e	-.R.....M.....K--..
DBP 7	.T.....I.....I.....Q.---KSG..
Ssh7b	.T.....I.....I.....EG.....Q.---KQ--..
Sso7d	--.....I.....I.....EG.....Q.---KQ--..
Ssh7a	--.....Q.I.....I.....EG.....Q.---KQ--..

Figure 4

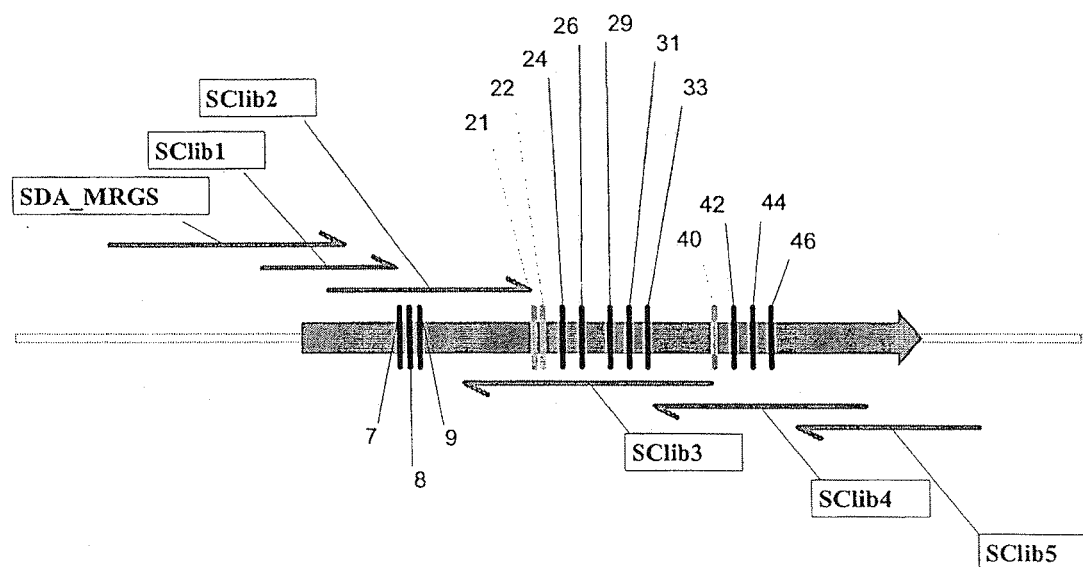


Figure 5

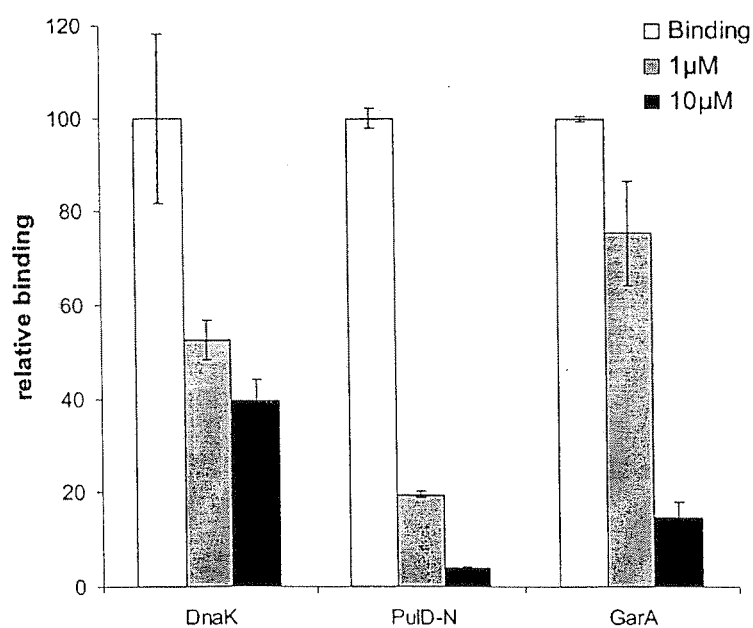


Figure 6a

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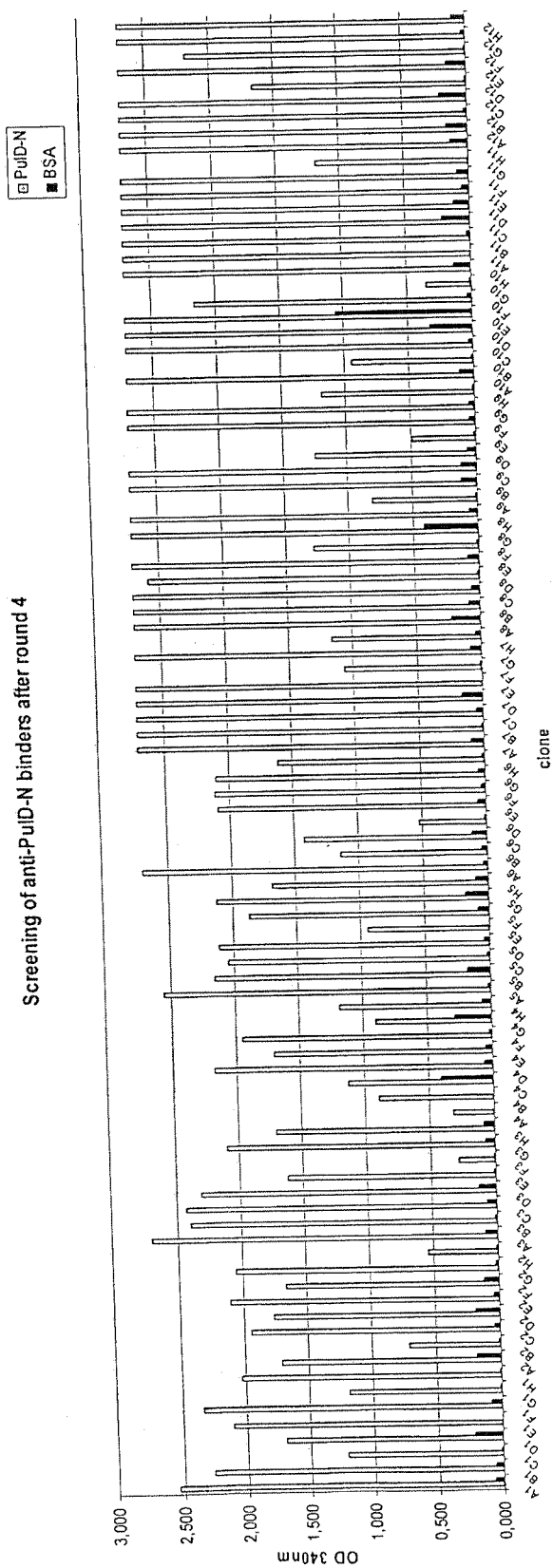


Figure 6b

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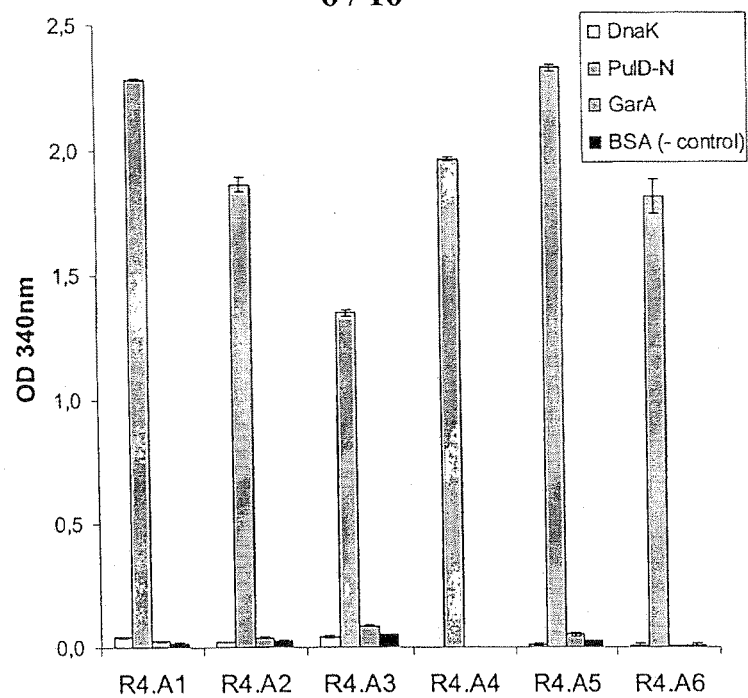


Figure 6c

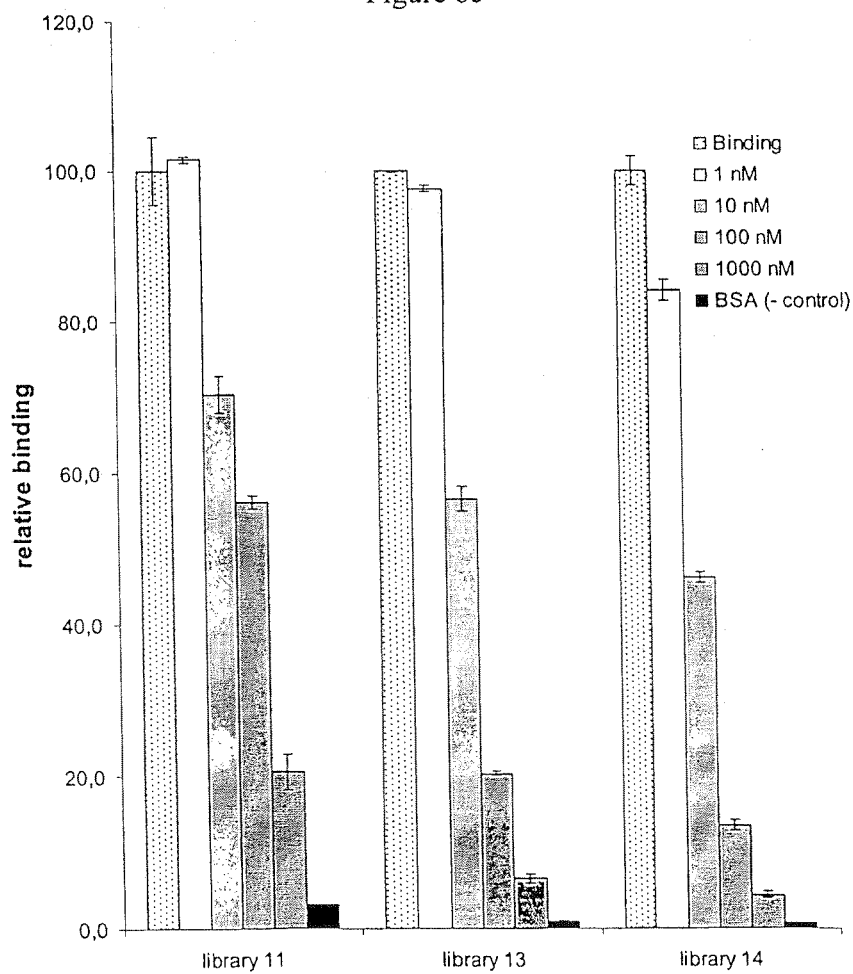


Figure 7

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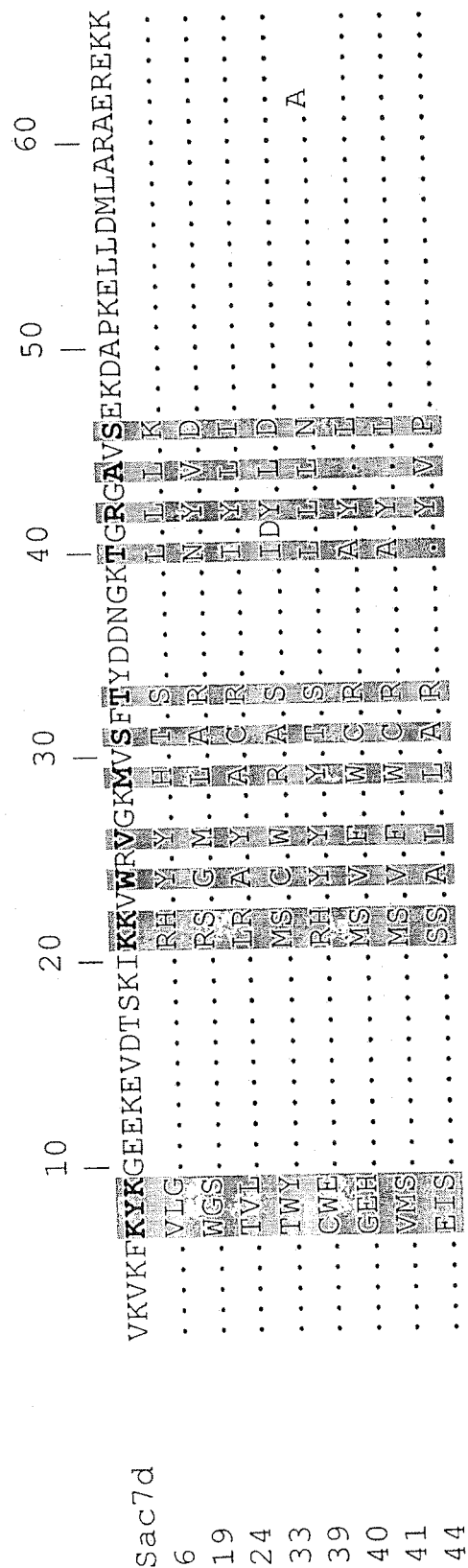


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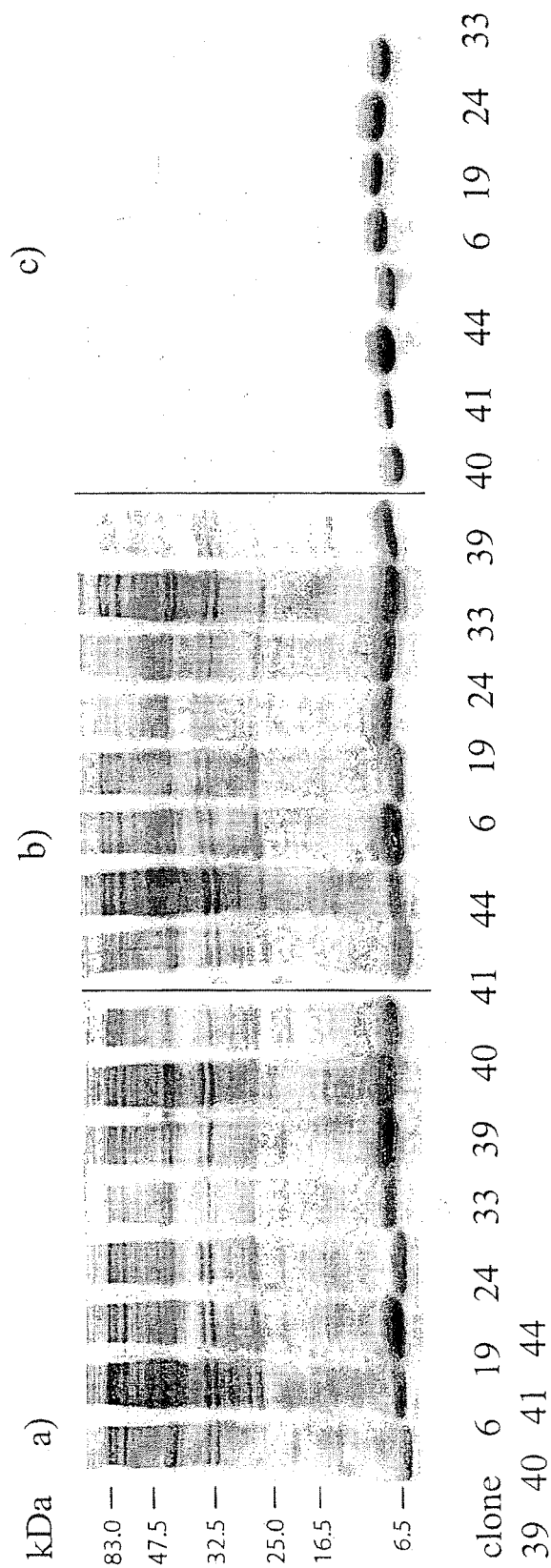


Figure 9

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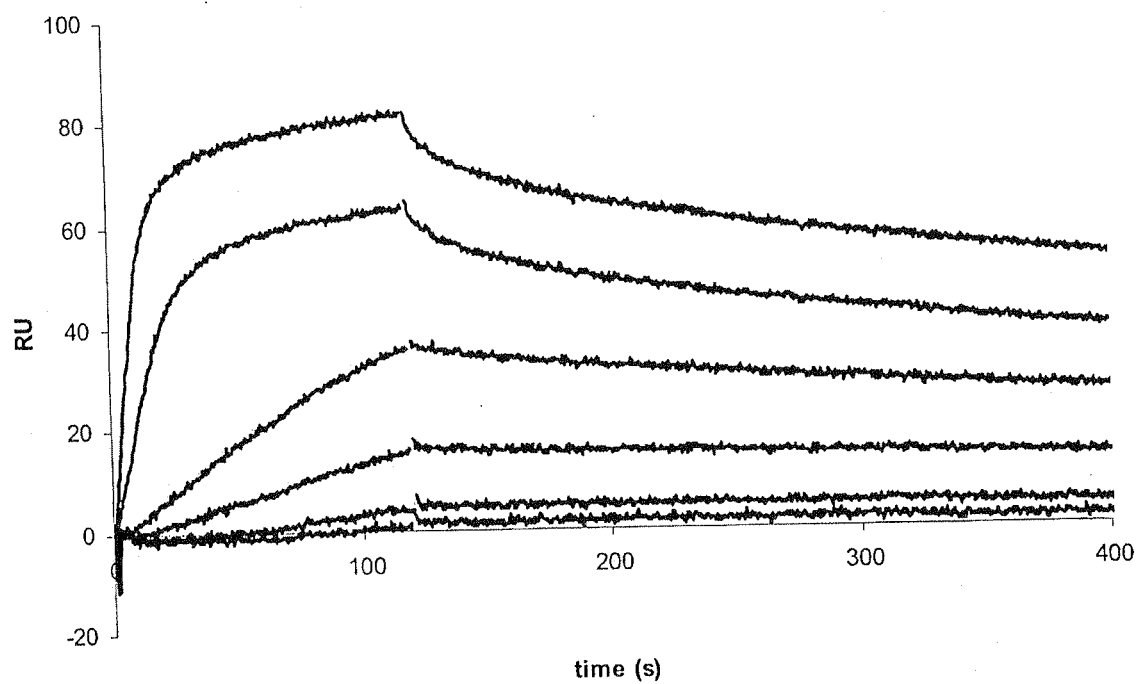


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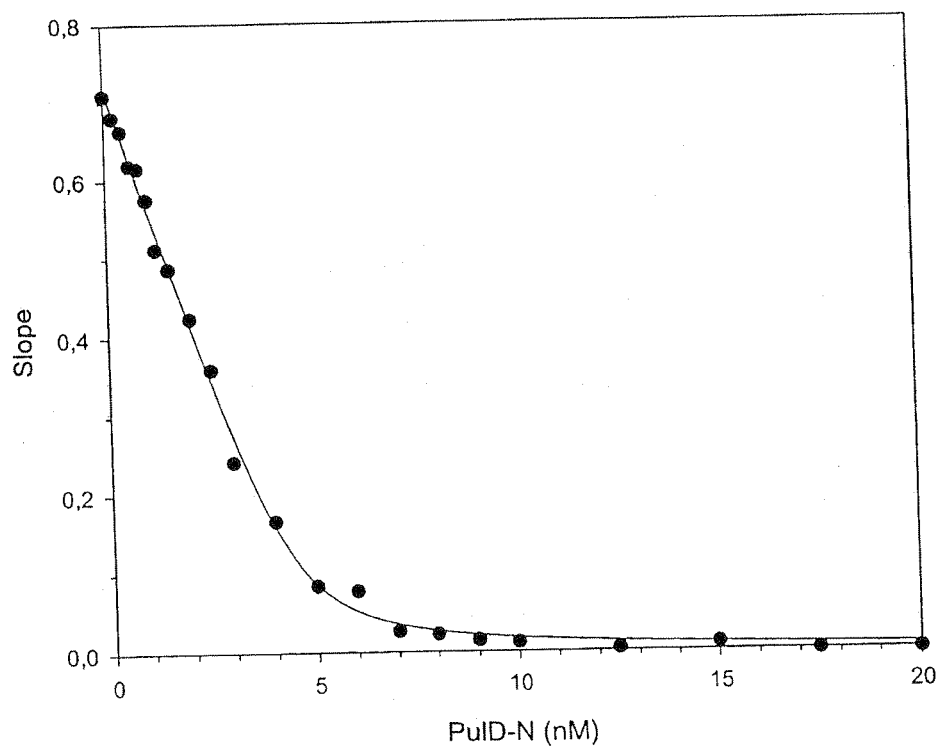


Figure 10b

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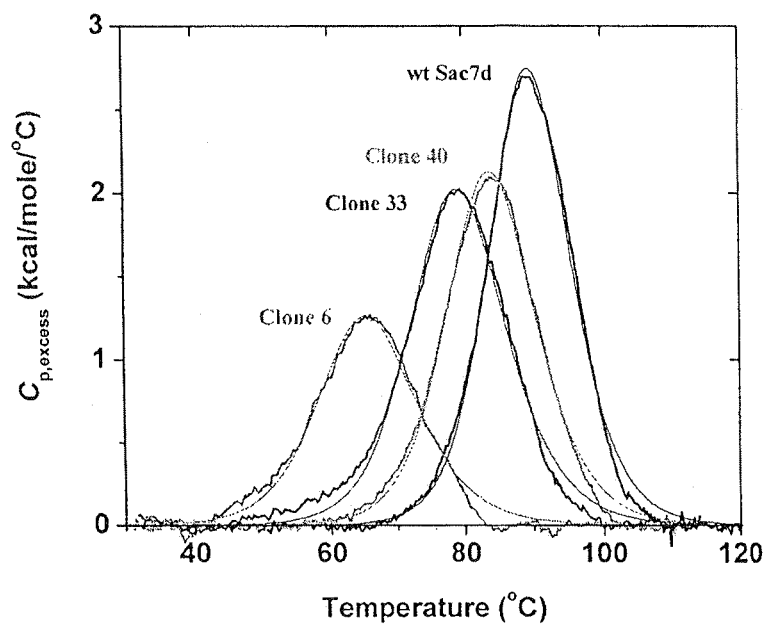


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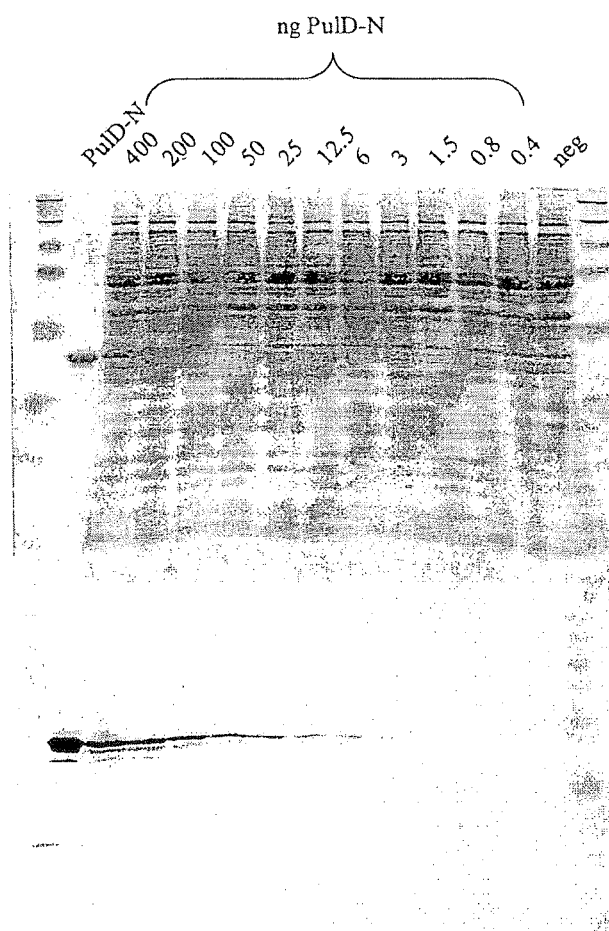


Figure 12a

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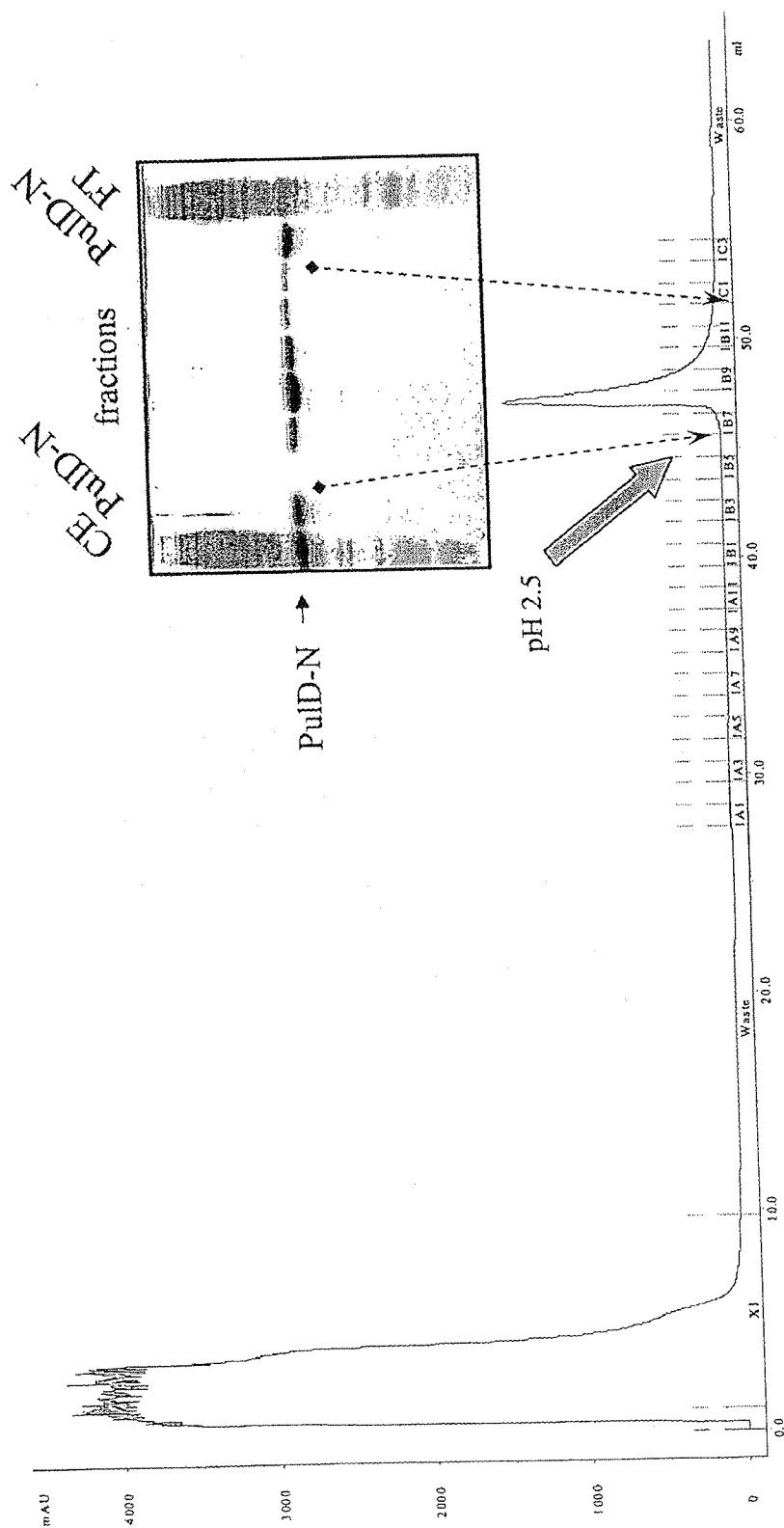


Figure 12b

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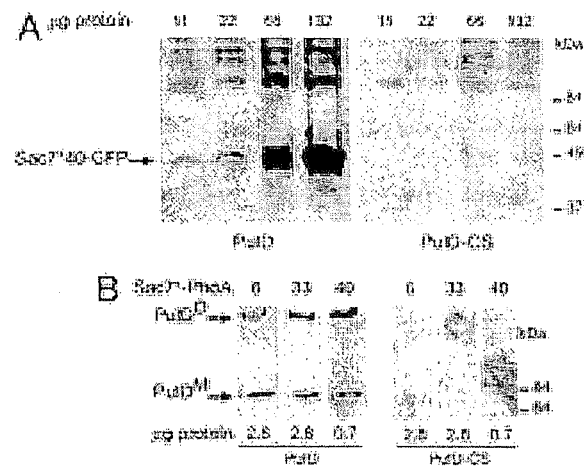


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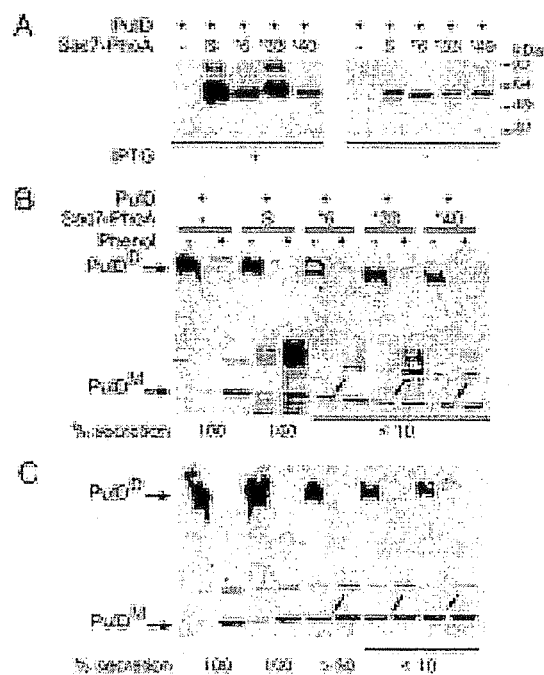


Figure 14

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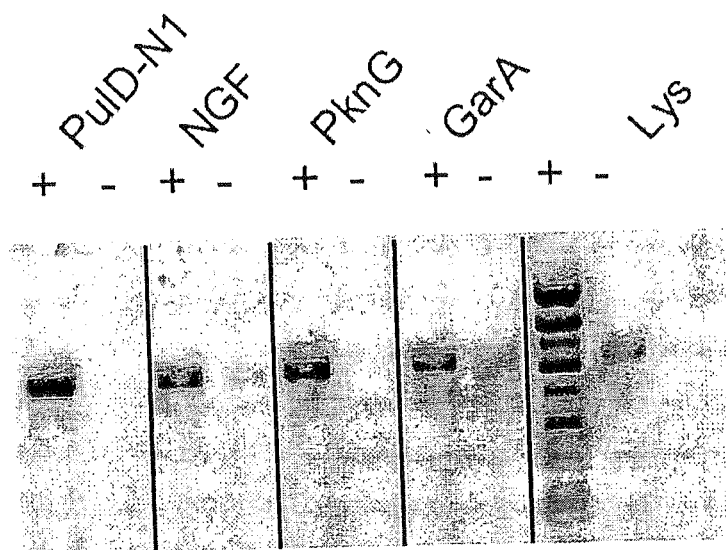


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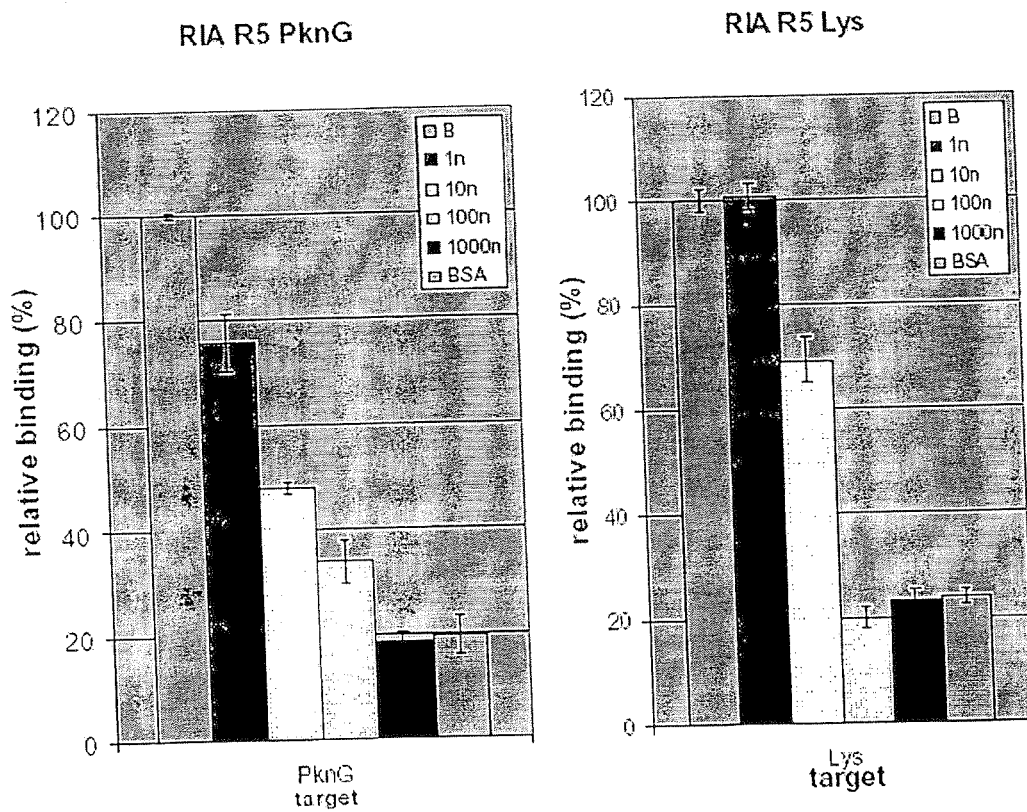
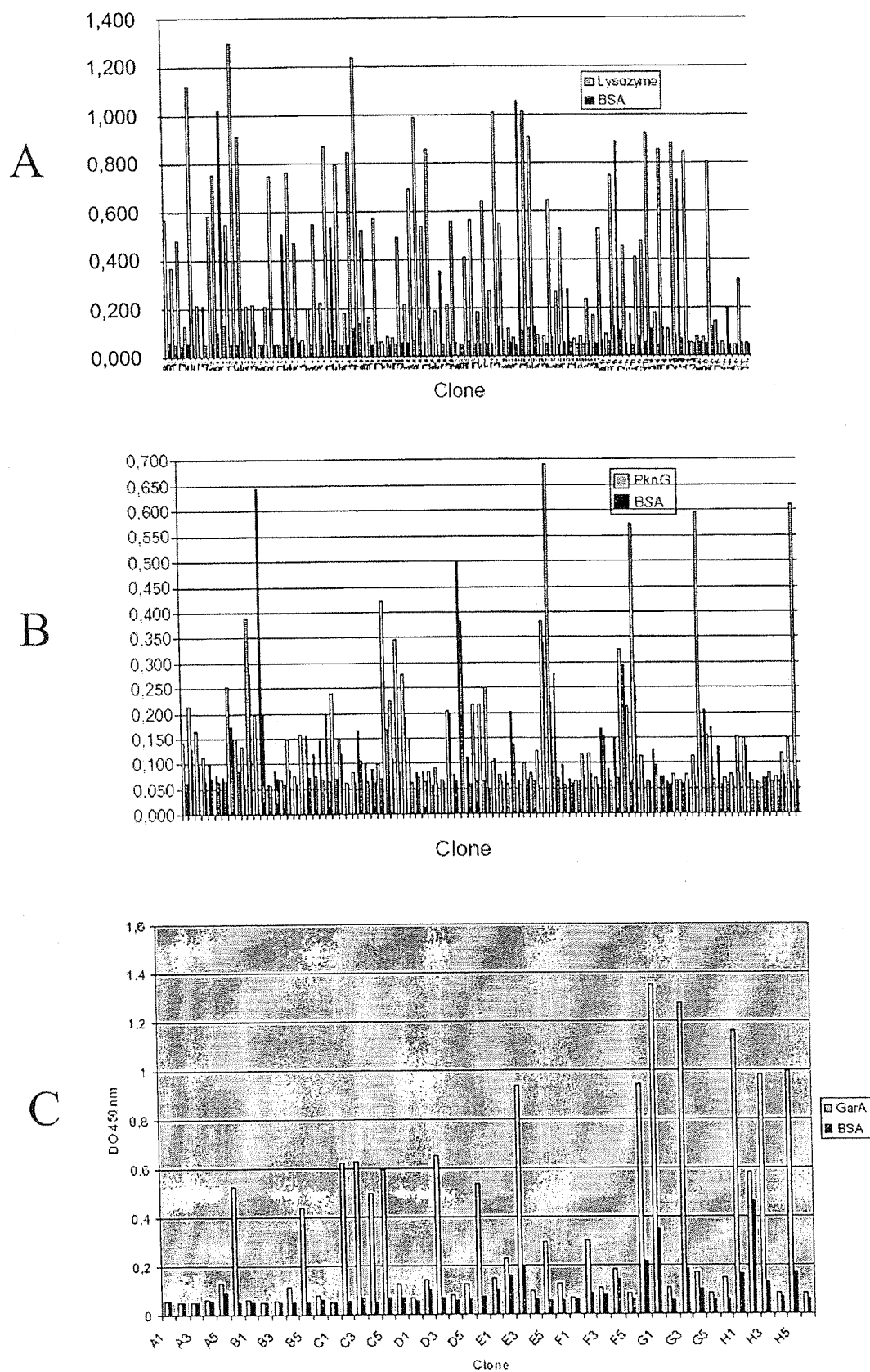


Figure 16

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	1	10	20	30	40	50	60	68
Sac_BK_1	GSVKVKFXXXGEEKEVDTSKIXXVXRKXGXVXFYDDNGKXGXGXVXEKDPKELL							DHLARREREKKL
Lys_B10_1	GVD.....	VH.K.A.C.L.I.....				N.Y.D.T.....		
Lys_B11_1	IVH.....	VH.K.A.C.L.I.....				N.Y.D.T.....		
Lys_B2_1	IVH.....	VH.K.A.C.L.I.....				N.Y.D.T.....		
Lys_C4_1	IVH.....	VH.K.A.C.L.I.....				N.Y.D.T.....		
Lys_O11_1	IVH.....	VH.K.A.C.L.I.....				N.Y.D.T.....		
Lys_H10_1	IVH.....	VH.K.A.C.L.I.....				N.Y.D.T.....		
Lys_E2_1	IVH.....	VH.K.A.C.L.I.....				N.Y.D.T.....		
Lys_D6_1	IVH.....	VH.K.A.C.L.I.....				N.Y.D.T.....		
Lys_D4_1	IVHD.....	VH.K.A.C.L.I.....				N.Y.D.T.....		
Lys_H4_1	FMN.....	VH.K.A.C.L.I.....				N.Y.D.T.....		
Lys_H8_1	VMC.....	IT.K.T.E.D.L.....				N.Y.T.Y.....		
Lys_B3_1	DLC.....	VY.A.D.T.L.N.....				S.R.E.S.....		

Figure 18

	1	10	20	30	40	50	60	68
Sac7_HT	GSVKVKFKYKGEKEVDTSKIKKVVHRVGKMYSEFTYDDNGKKTGRGAVSEKDPKELL							DHLARREREKKL
D5_GarA	L.L.....	HF.H.A.H.Y.Q.....				Y.I.H.R.....		
Consensus	L.L.....	KK.N.A.H.S.Q.....				E.R.A.F.....		

Figure 19

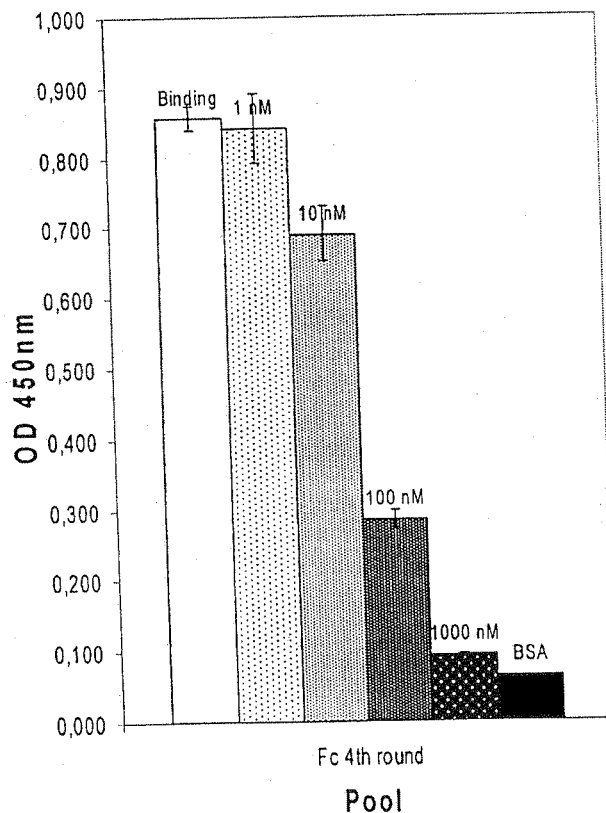


Figure 20

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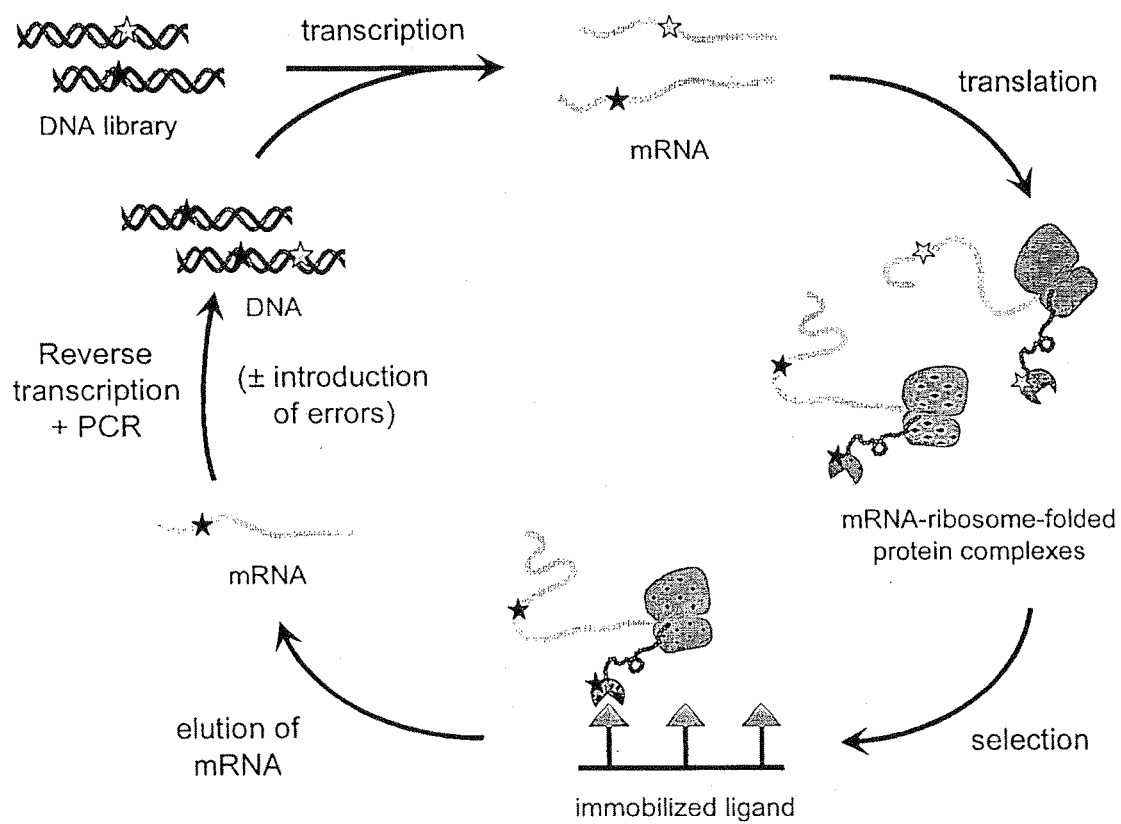


Figure 21

SEQUENCE LISTING

<110> INSTITUT PASTEUR
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE
PECORARI, Frédéric
ALZARI, Pedro

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<130> VMA/ah-F226/133

<160> 47

<170> PatentIn version 3.3

<210> 1

<211> 66

<212> PRT

<213> Sulfolobus sp.

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			20					25					30		

Thr	Tyr	Asp	Asp	Asn	Gly	Lys	Thr	Gly	Arg	Gly	Ala	Val	Ser	Glu	Lys
		35					40					45			

Asp	Ala	Pro	Lys	Glu	Leu	Leu	Asp	Met	Leu	Ala	Arg	Ala	Glu	Arg	Glu
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Lys	Lys
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 20 25 30

His Val Tyr Arg Tyr Gly Lys His Val Thr Phe Ser Tyr Asp Asp Asn
 35 40 45

Gly Lys Leu Gly Leu Gly Leu Val Lys Glu Lys Asp Ala Pro Lys Glu
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Ser Val Cys Arg Trp Gly Lys Arg Val Ala Phe Ser Tyr Asp Asp Asn
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Gly Lys Ile Asp Tyr Gly Leu Val Asp Glu Lys Asp Ala Pro Lys Glu
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Phe Cys Trp Glu Gly Glu Glu Lys Glu Val Asp Thr Ser Lys Ile Arg
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His Val Tyr Arg Tyr Gly Lys Tyr Val Thr Phe Ser Tyr Asp Asp Asn
 35 40 45

Gly Lys Leu Gly Leu Gly Leu Val Asn Glu Lys Asp Ala Pro Lys Glu
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Leu Leu Asp Met Leu Ala Arg Ala Ala
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Ser Val Val Arg Phe Gly Lys Trp Val Cys Phe Arg Tyr Asp Asp Asn
 35 40 45

Gly Lys Ala Gly Tyr Gly Ala Val Leu Glu Lys Asp Ala Pro Lys Glu
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Leu Leu Asp Met Leu Ala Arg Ala Glu Arg Glu Lys Lys Leu Asn

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70

75

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Ser Val Val Arg Phe Gly Lys Trp Val Cys Phe Arg Tyr Asp Asp Asn
 35 40 45

Gly Lys Ala Gly Tyr Gly Ala Val Leu Glu Lys Asp Ala Pro Lys Glu
 50 55 60

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Ser Val Lys Val Lys Phe Val Leu Gly Gly Glu Glu Lys Glu Val Asp
35 40 45

Thr Ser Lys Ile Arg His Val Tyr Arg Tyr Gly Lys His Val Thr Phe
50 55 60

Ser Tyr Asp Asp Asn Gly Lys Leu Gly Leu Gly Leu Val Lys Glu Lys
65 70 75 80

Asp Ala Pro Lys Glu Leu Leu Asp Met Leu Ala Arg Ala Glu Arg Glu
85 90 95

Lys Lys Leu Arg Ala Gln Pro Gly Val Leu Glu Asn Arg Ala Ala Gln
100 105 110

Gly Asp Ile Thr Ala Pro Gly Gly Ala Arg Arg Leu Thr Gly Asp Gln
115 120 125

Thr Ala Ala Leu Arg Asp Ser Leu Ser Asp Lys Pro Ala Lys Asn Ile
130 135 140

Ile Leu Leu Ile Gly Asp Gly Met Gly Asp Ser Glu Ile Thr Ala Ala
145 150 155 160

Arg Asn Tyr Ala Glu Gly Ala Gly Gly Phe Phe Lys Gly Ile Asp Ala
165 170 175

Leu Pro Leu Thr Gly Gln Tyr Thr His Tyr Ala Leu Asn Lys Lys Thr
180 185 190

Gly Lys Pro Asp Tyr Val Thr Asp Ser Ala Ala Ser Ala Thr Ala Trp
 195 200 205

Ser Thr Gly Val Lys Thr Tyr Asn Gly Ala Leu Gly Val Asp Ile His
 210 215 220

Glu Lys Asp His Pro Thr Ile Leu Glu Met Ala Lys Ala Ala Gly Leu
 225 230 235 240

Ala Thr Gly Asn Val Ser Thr Ala Glu Leu Gln Gly Ala Thr Pro Ala
 245 250 255

Ala Leu Val Ala His Val Thr Ser Arg Lys Cys Tyr Gly Pro Ser Ala
 260 265 270

Thr Ser Glu Lys Cys Pro Gly Asn Ala Leu Glu Lys Gly Gly Lys Gly
 275 280 285

Ser Ile Thr Glu Gln Leu Leu Asn Ala Arg Ala Asp Val Thr Leu Gly
 290 295 300

Gly Gly Ala Lys Thr Phe Ala Glu Thr Ala Thr Ala Gly Glu Trp Gln
 305 310 315 320

Gly Lys Thr Leu Arg Glu Gln Ala Gln Ala Arg Gly Tyr Gln Leu Val
 325 330 335

Ser Asp Ala Ala Ser Leu Asn Ser Val Thr Glu Ala Asn Gln Gln Lys
 340 345 350

Pro Leu Leu Gly Leu Phe Ala Asp Gly Asn Met Pro Val Arg Trp Leu
 355 360 365

Gly Pro Lys Ala Thr Tyr His Gly Asn Ile Asp Lys Pro Ala Val Thr
 370 375 380

Cys Thr Pro Asn Pro Gln Arg Asn Asp Ser Val Pro Thr Leu Ala Gln
 385 390 395 400

Met Thr Asp Lys Ala Ile Glu Leu Leu Ser Lys Asn Glu Lys Gly Phe
 405 410 415

Phe Leu Gln Val Glu Gly Ala Ser Ile Asp Lys Gln Gly His Ala Ala
 420 425 430

Asn Pro Cys Gly Gln Ile Gly Glu Thr Val Asp Leu Asp Glu Ala Val
 435 440 445

Gln Arg Ala Leu Glu Phe Ala Lys Lys Glu Gly Asn Thr Leu Val Ile
 450 455 460

Val Thr Ala Asp His Ala His Ala Ser Gln Ile Val Ala Pro Asp Thr
 465 470 475 480

Lys Ala Pro Gly Leu Thr Gln Ala Leu Asn Thr Lys Asp Gly Ala Val
 485 490 495

Met Val Met Ser Tyr Gly Asn Ser Glu Glu Asp Ser Gln Glu His Thr
 500 505 510

Gly Ser Gln Leu Arg Ile Ala Ala Tyr Gly Pro His Ala Ala Asn Val
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Val Gly Leu Thr Asp Gln Thr Asp Leu Phe Tyr Thr Met Lys Ala Ala
 530 535 540

Leu Gly Leu Lys
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His Val Tyr Arg Tyr Gly Lys His Val Thr Phe Ser Tyr Asp Asp Asn
 35 40 45

Gly Lys Leu Gly Leu Gly Leu Val Lys Glu Lys Asp Ala Pro Lys Glu
 50 55 60

Leu Leu Asp Met Leu Ala Arg Ala Glu Arg Glu Lys Lys Leu Gly Ser
 65 70 75 80

Ala Gly Ser Ala Ala Gly Ser Gly Glu Phe Ser Lys Gly Glu Glu Leu
 85 90 95

Phe Thr Gly Val Val Pro Ile Leu Val Glu Leu Asp Gly Asp Val Asn
 100 105 110

Gly His Lys Phe Ser Val Ser Gly Glu Gly Glu Gly Asp Ala Thr Tyr
 115 120 125

Gly Lys Leu Thr Leu Lys Phe Ile Cys Thr Thr Gly Lys Leu Pro Val
 130 135 140

Pro Trp Pro Thr Leu Val Thr Thr Leu Thr Tyr Gly Val Gln Cys Phe
 145 150 155 160

Ser Arg Tyr Pro Asp His Met Lys Arg His Asp Phe Phe Lys Ser Ala
 165 170 175

Met Pro Glu Gly Tyr Val Gln Glu Arg Thr Ile Ser Phe Lys Asp Asp
 180 185 190

Gly Asn Tyr Lys Thr Arg Ala Glu Val Lys Phe Glu Gly Asp Thr Leu
 195 200 205

Val Asn Arg Ile Glu Leu Lys Gly Ile Asp Phe Lys Glu Asp Gly Asn
 210 215 220

Ile Leu Gly His Lys Leu Glu Tyr Asn Tyr Asn Ser His Asn Val Tyr
 225 230 235 240

Ile Thr Ala Asp Lys Gln Lys Asn Gly Ile Lys Ala Asn Phe Lys Ile
 245 250 255

Arg His Asn Ile Glu Asp Gly Ser Val Gln Leu Ala Asp His Tyr Gln
 260 265 270

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

Tyr Leu Ser Thr Gln Ser Ala Leu Ser Lys Asp Pro Asn Glu Lys Arg
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<221> misc_feature
<222> (31)..(31)
<223> s is g or c

<220>
<221> misc_feature
<222> (32)..(33)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (40)..(40)

<223> s is g or c

<220>

<221> misc_feature

<222> (41)..(42)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (46)..(46)

<223> s is g or c

<220>

<221> misc_feature

<222> (47)..(48)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (52)..(52)

<223> s is g or c

<220>

<221> misc_feature

<222> (53)..(54)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (55)..(55)

<223> s is g or c

<220>

<221> misc_feature

<222> (56)..(57)

<223> n is a, c, g, or t

<400> 21

cttgccgttg tcgtcgtasn naaasnncac snntttgccs nnacgsnnaa csnnsnngat 60

cttactagtg tccacttc 78

<210> 22

<211> 66

<212> DNA

<213> Artificial

<220>

<223> primer SClb4

<220>

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<222> (28)..(28)

<223> s is g or c

<220>
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 <222> (29)..(30)
 <223> n is a, c, g, or t

<220>
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 <222> (34)..(34)
 <223> s is g or c

<220>
 <221> misc_feature
 <222> (35)..(36)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (40)..(40)
 <223> s is g or c

<220>
 <221> misc_feature
 <222> (41)..(42)
 <223> n is a, c, g, or t

<220>
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 <222> (46)..(46)
 <223> s is g or c

<220>
 <221> misc_feature
 <222> (47)..(48)
 <223> n is a, c, g, or t

<400> 22
 taataactct ttcggggcat ctttctcsnn cacsnggccs nngccsnct tgccgttgtc 60
 gtcgta 66

<210> 23
 <211> 64
 <212> DNA
 <213> Artificial

<220>
 <223> primer SClb5

<400> 23
 ccatataaag ctttttctcg cggtccgcac gcgctaacat atctaataac tctttcgggg 60
 catc 64

<210> 24
 <211> 39
 <212> DNA
 <213> Artificial

<220>

<223> primer SClinc

<400> 24

gcggaacgcg agaaaaagct ttatatggcc tcggggggcc

39

<210> 25

<211> 45

<212> DNA

<213> Artificial

<220>

<223> primer T7B

<400> 25

ccgcacacca gtaaggtgtg cggtttcagt tgccgctttc tttct

45

<210> 26

<211> 33

<212> DNA

<213> Artificial

<220>

<223> primer SCPhoAF

<400> 26

attaatggta ccggatccgt gaaggtgaaa ttc

33

<210> 27

<211> 36

<212> DNA

<213> Artificial

<220>

<223> primer SCPhoAR

<400> 27

ataattgagc tctaagcttt ttttcacgct ccgcac

36

<210> 28

<211> 64

<212> PRT

<213> Sulfolobus sp.

<400> 28

Met	Ala	Thr	Val	Lys	Phe	Lys	Tyr	Lys	Gly	Glu	Glu	Lys	Glu	Val	Asp
1				5				10				15			

Ile	Ser	Lys	Ile	Lys	Lys	Val	Trp	Arg	Val	Gly	Lys	Met	Ile	Ser	Phe
			20					25					30		

Thr	Tyr	Asp	Glu	Gly	Gly	Gly	Lys	Thr	Gly	Arg	Gly	Ala	Val	Ser	Glu
			35				40					45			

Lys Asp Ala Pro Lys Glu Leu Leu Gln Met Leu Glu Lys Gln Lys Lys
 50 55 60

<210> 29
 <211> 89
 <212> PRT
 <213> Escherichia coli

<400> 29

Met Lys Lys Met Phe Met Ala Val Leu Phe Ala Leu Val Ser Val Asn
 1 5 10 15

Ala Met Ala Ala Asp Cys Ala Lys Gly Lys Ile Glu Phe Ser Lys Tyr
 20 25 30

Asn Glu Asp Asp Thr Phe Thr Val Lys Val Asp Gly Lys Glu Tyr Trp
 35 40 45

Thr Ser Arg Trp Asn Leu Gln Pro Leu Leu Gln Ser Ala Gln Leu Thr
 50 55 60

Gly Met Thr Val Thr Ile Lys Ser Ser Thr Cys Glu Ser Gly Ser Gly
 65 70 75 80

Phe Ala Glu Val Gln Phe Asn Asn Asp
 85

<210> 30
 <211> 128
 <212> PRT
 <213> Homo sapiens

<400> 30

Met Ser Leu Arg Leu Asp Thr Thr Pro Ser Cys Asn Ser Ala Arg Pro
 1 5 10 15

Leu His Ala Leu Gln Val Leu Leu Leu Leu Ser Leu Leu Leu Thr Ala
 20 25 30

Leu Ala Ser Ser Thr Lys Gly Gln Thr Lys Arg Asn Leu Ala Lys Gly
 35 40 45

Lys Glu Glu Ser Leu Asp Ser Asp Leu Tyr Ala Glu Leu Arg Cys Met
 50 55 60

Cys Ile Lys Thr Thr Ser Gly Ile His Pro Lys Asn Ile Gln Ser Leu
 65 70 75 80

Glu Val Ile Gly Lys Gly Thr His Cys Asn Gln Val Glu Val Ile Ala
85 90 95

Thr Leu Lys Asp Gly Arg Lys Ile Cys Leu Asp Pro Asp Ala Pro Arg
100 105 110

Ile Lys Lys Ile Val Gln Lys Lys Leu Ala Gly Asp Glu Ser Ala Asp
115 120 125

<210> 31

<211> 142

<212> PRT

<213> Azotobacter vinelandii

<400> 31

Met Lys Ile Ser Ala Arg Asn Val Phe Lys Gly Thr Val Ser Ala Leu
1 5 10 15

Lys Glu Gly Ala Val Asn Ala Glu Val Asp Ile Leu Leu Gly Gly Gly
20 25 30

Asp Lys Leu Ala Ala Val Val Thr Leu Glu Ser Ala Arg Ser Leu Gln
35 40 45

Leu Ala Ala Gly Lys Glu Val Val Ala Val Val Lys Ala Pro Trp Val
50 55 60

Leu Leu Met Thr Asp Ser Ser Gly Tyr Arg Leu Ser Ala Arg Asn Ile
65 70 75 80

Leu Thr Gly Thr Val Lys Thr Ile Glu Thr Gly Ala Val Asn Ala Glu
85 90 95

Val Thr Leu Ala Leu Gln Gly Gly Thr Glu Ile Thr Ser Met Val Thr
100 105 110

Lys Glu Ala Val Ala Glu Leu Gly Leu Lys Pro Gly Ala Ser Ala Ser
115 120 125

Ala Val Ile Lys Ala Ser Asn Val Ile Leu Gly Val Pro Ala
130 135 140

<210> 32

<211> 14

<212> PRT

<213> Artificial

<220> .

<223> Peptidic linker

<400> 32

Lys Leu Gly Ser Ala Gly Ser Ala Ala Gly Ser Gly Glu Phe
 1 5 10

<210> 33

<211> 65

<212> PRT

<213> Sulfolobus sp.

<400> 33

Val Lys Val Lys Phe Lys Tyr Lys Gly Glu Glu Lys Glu Val Asp Thr
 1 5 10 15

Ser Lys Ile Lys Lys Val Trp Arg Val Gly Lys Met Val Ser Phe Thr
 20 25 30

Tyr Asp Asp Asn Gly Lys Thr Gly Arg Gly Ala Val Ser Glu Lys Asp
 35 40 45

Ala Pro Lys Glu Leu Leu Asp Met Leu Ala Arg Ala Glu Arg Glu Lys
 50 55 60

Lys
 65

<210> 34

<211> 63

<212> PRT

<213> Sulfolobus acidocaldarius

<400> 34

Lys Val Arg Phe Lys Tyr Lys Gly Glu Glu Lys Glu Val Asp Thr Ser
 1 5 10 15

Lys Ile Lys Lys Val Trp Arg Val Gly Lys Met Val Ser Phe Thr Tyr
 20 25 30

Asp Asp Asn Gly Lys Thr Gly Arg Gly Ala Val Ser Glu Lys Asp Ala
 35 40 45

Pro Lys Glu Leu Met Asp Met Leu Ala Arg Ala Glu Lys Lys Lys
 50 55 60

<210> 35

<211> 63
 <212> PRT
 <213> Sulfolobus tokodaii

<400> 35

Val Thr Val Lys Phe Lys Tyr Lys Gly Glu Glu Lys Glu Val Asp Ile
 1 5 10 15

Ser Lys Ile Lys Lys Val Trp Arg Val Gly Lys Met Ile Ser Phe Thr
 20 25 30

Tyr Asp Asp Asn Gly Lys Thr Gly Arg Gly Ala Val Ser Glu Lys Asp
 35 40 45

Ala Pro Lys Glu Leu Leu Gln Met Leu Glu Lys Ser Gly Lys Lys
 50 55 60

<210> 36
 <211> 62
 <212> PRT
 <213> Sulfolobus shibatae

<400> 36

Val Thr Val Lys Phe Lys Tyr Lys Gly Glu Glu Lys Glu Val Asp Thr
 1 5 10 15

Ser Lys Ile Lys Lys Val Trp Arg Val Gly Lys Met Ile Ser Phe Thr
 20 25 30

Tyr Asp Glu Gly Gly Lys Thr Gly Arg Gly Ala Val Ser Glu Lys Asp
 35 40 45

Ala Pro Lys Glu Leu Leu Gln Met Leu Glu Lys Gln Lys Lys
 50 55 60

<210> 37
 <211> 60
 <212> PRT
 <213> Sulfolobus solfataricus

<400> 37

Val Lys Phe Lys Tyr Lys Gly Glu Glu Lys Glu Val Asp Ile Ser Lys
 1 5 10 15

Ile Lys Lys Val Trp Arg Val Gly Lys Met Ile Ser Phe Thr Tyr Asp
 20 25 30

Glu Gly Gly Lys Thr Gly Arg Gly Ala Val Ser Glu Lys Asp Ala Pro

35

40

45

Lys Glu Leu Leu Gln Met Leu Glu Lys Gln Lys Lys
 50 55 60

<210> 38

<211> 60

<212> PRT

<213> Sulfolobus shibatae

<400> 38

Val Lys Phe Lys Tyr Lys Gly Glu Glu Lys Gln Val Asp Ile Ser Lys
 1 5 10 15

Ile Lys Lys Val Trp Arg Val Gly Lys Met Ile Ser Phe Thr Tyr Asp
 20 25 30

Glu Gly Gly Lys Thr Gly Arg Gly Ala Val Ser Glu Lys Asp Ala Pro
 35 40 45

Lys Glu Leu Leu Gln Met Leu Glu Lys Gln Lys Lys
 50 55 60

<210> 39

<211> 65

<212> PRT

<213> Artificial

<220>

<223> binder

<400> 39

Val Lys Val Lys Phe Val Leu Gly Gly Glu Glu Lys Glu Val Asp Thr
 1 5 10 15

Ser Lys Ile Arg His Val Tyr Arg Tyr Gly Lys His Val Thr Phe Ser
 20 25 30

Tyr Asp Asp Asn Gly Lys Leu Gly Leu Gly Leu Val Lys Glu Lys Asp
 35 40 45

Ala Pro Lys Glu Leu Leu Asp Met Leu Ala Arg Ala Glu Arg Glu Lys
 50 55 60

Lys
 65

<210> 40

<211> 65
 <212> PRT
 <213> Artificial

<220>
 <223> binder

<400> 40

Val Lys Val Lys Phe Trp Gly Ser Gly Glu Glu Lys Glu Val Asp Thr
 1 5 10 15

Ser Lys Ile Arg Ser Val Gly Arg Met Gly Lys Leu Val Ala Phe Arg
 20 25 30

Tyr Asp Asp Asn Gly Lys Asn Gly Tyr Gly Val Val Asp Glu Lys Asp
 35 40 45

Ala Pro Lys Glu Leu Leu Asp Met Leu Ala Arg Ala Glu Arg Glu Lys
 50 55 60

Lys
 65

<210> 41
 <211> 65
 <212> PRT
 <213> Artificial

<220>
 <223> binder

<400> 41

Val Lys Val Lys Phe Thr Val Leu Gly Glu Glu Lys Glu Val Asp Thr
 1 5 10 15

Ser Lys Ile Leu Arg Val Ala Arg Tyr Gly Lys Ala Val Cys Phe Arg
 20 25 30

Tyr Asp Asp Asn Gly Lys Ile Gly Tyr Gly Leu Val Ile Glu Lys Asp
 35 40 45

Ala Pro Lys Glu Leu Leu Asp Met Leu Ala Arg Ala Glu Arg Glu Lys
 50 55 60

Lys
 65

<210> 42
 <211> 65

<212> PRT
<213> Artificial

<220>
<223> binder

<400> 42

Val Lys Val Lys Phe Thr Trp Tyr Gly Glu Glu Lys Glu Val Asp Thr
1 5 10 15

Ser Lys Ile Met Ser Val Cys Arg Trp Gly Lys Arg Val Ala Phe Ser
20 25 30

Tyr Asp Asp Asn Gly Lys Ile Asp Tyr Gly Leu Val Asp Glu Lys Asp
35 40 45

Ala Pro Lys Glu Leu Leu Asp Met Leu Ala Arg Ala Glu Arg Glu Lys
50 55 60

Lys
65

<210> 43
<211> 61
<212> PRT
<213> Artificial

<220>
<223> binder

<400> 43

Val Lys Val Lys Phe Cys Trp Glu Gly Glu Glu Lys Glu Val Asp Thr
1 5 10 15

Ser Lys Ile Arg His Val Tyr Arg Tyr Gly Lys Tyr Val Thr Phe Ser
20 25 30

Tyr Asp Asp Asn Gly Lys Leu Gly Leu Gly Leu Val Asn Glu Lys Asp
35 40 45

Ala Pro Lys Glu Leu Leu Asp Met Leu Ala Arg Ala Ala
50 55 60

<210> 44
<211> 65
<212> PRT
<213> Artificial

<220>
<223> binder

<400> 44

Val Lys Val Lys Phe Gly Glu His Gly Glu Glu Lys Glu Val Asp Thr
 1 5 10 15

Ser Lys Ile Met Ser Val Val Arg Phe Gly Lys Trp Val Cys Phe Arg
 20 25 30

Tyr Asp Asp Asn Gly Lys Ala Gly Tyr Gly Ala Val Leu Glu Lys Asp
 35 40 45

Ala Pro Lys Glu Leu Leu Asp Met Leu Ala Arg Ala Glu Arg Glu Lys
 50 55 60

Lys
 65

<210> 45
 <211> 65
 <212> PRT
 <213> Artificial

<220>
 <223> binder

<400> 45

Val Lys Val Lys Phe Val Met Ser Gly Glu Glu Lys Glu Val Asp Thr
 1 5 10 15

Ser Lys Ile Met Ser Val Val Arg Phe Gly Lys Trp Val Cys Phe Arg
 20 25 30

Tyr Asp Asp Asn Gly Lys Ala Gly Tyr Gly Ala Val Leu Glu Lys Asp
 35 40 45

Ala Pro Lys Glu Leu Leu Asp Met Leu Ala Arg Ala Glu Arg Glu Lys
 50 55 60

Lys
 65

<210> 46
 <211> 65
 <212> PRT
 <213> Artificial

<220>
 <223> binder

<400> 46

Val Lys Val Lys Phe Glu Ile Ser Gly Glu Glu Lys Glu Val Asp Thr
 1 5 10 15

Ser Lys Ile Ser Ser Val Ala Arg Leu Gly Lys Leu Val Ala Phe Arg
 20 25 30

Tyr Asp Asp Asn Gly Lys Thr Gly Tyr Gly Val Val Pro Glu Lys Asp
 35 40 45

Ala Pro Lys Glu Leu Leu Asp Met Leu Ala Arg Ala Glu Arg Glu Lys
 50 55 60

Lys
 65

<210> 47
 <211> 68
 <212> PRT
 <213> Artificial

<220>
 <223> D5_GarA

<400> 47

Gly Ser Val Lys Val Lys Phe Leu Tyr Leu Gly Glu Glu Lys Glu Val
 1 5 10 15

Asp Thr Ser Lys Ile Trp Phe Val Met Arg Ala Gly Lys His Val Tyr
 20 25 30

Phe Gln Tyr Asp Asp Asn Gly Lys Tyr Gly Ile Gly Trp Val Arg Glu
 35 40 45

Lys Asp Ala Pro Lys Glu Leu Leu Asp Met Leu Ala Arg Ala Glu Arg
 50 55 60

Glu Lys Lys Leu
 65