

SEQUENCE LISTING

<110> Janssen Vaccine and Prevention B.V.

<120> Adenovirus and uses thereof

<130> 0299 WO 00 ORD

<160> 19

<170> PatentIn version 3.5

<210> 1

<211> 321

<212> PRT

<213> Artificial Sequence

<220>

<223> BZ1 hexon HVRs

<400> 1

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Glu	Asp	Glu	Glu	Met	Ala	Gln	Glu	Asp	Gln	Gln	Pro	Thr	Lys	Lys	Thr
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His	Val	Tyr	Ala	Gln	Ala	Pro	Leu	Ser	Gly	Glu	Gln	Ile	Thr	Lys	Asp
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Gly	Leu	Gln	Ile	Gly	Ala	Glu	Val	Thr	Gly	Glu	Thr	Ser	Lys	Pro	Ile
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Phe	Ala	Asp	Lys	Thr	Phe	Gln	Pro	Glu	Pro	Gln	Ile	Gly	Glu	Ser	Gln
65					70					75					80

Trp	Asn	Glu	Ala	Asp	Ala	Thr	Val	Ala	Gly	Gly	Arg	Val	Leu	Lys	Lys
				85					90					95	

Thr	Thr	Pro	Met	Lys	Pro	Cys	Tyr	Gly	Ser	Tyr	Ala	Arg	Pro	Thr	Asn
			100					105						110	

Ala Asn Gly Gly Gln Gly Ile Leu Glu Ala Asn Ala Lys Gly Glu Leu
115 120 125

Glu Ser Lys Val Glu Met Gln Phe Phe Ser Asn Thr Thr Thr Leu Asn
130 135 140

Val Arg Asp Gly Glu Asn Gly Leu Lys Pro Lys Val Val Leu Tyr Ser
145 150 155 160

Glu Asp Val Asn Leu Glu Ser Pro Asp Thr His Leu Ser Tyr Lys Pro
165 170 175

Lys Lys Asp Asp Val Asn Ala Lys Ile Met Leu Gly Gln Gln Ala Met
180 185 190

Pro Asn Arg Pro Asn Leu Ile Gly Phe Arg Asp Asn Phe Ile Gly Leu
195 200 205

Met Tyr Tyr Asn Ser Thr Gly Asn Met Gly Val Leu Ala Gly Gln Ala
210 215 220

Ser Gln Leu Asn Ala Val Val Asp Leu Gln Asp Arg Asn Thr Glu Leu
225 230 235 240

Ser Tyr Gln Leu Met Leu Asp Ser Ile Gly Asp Arg Thr Arg Tyr Phe
245 250 255

Ser Met Trp Asn Gln Ala Val Asp Ser Tyr Asp Pro Asp Val Arg Ile
260 265 270

Ile Glu Asn His Gly Val Glu Asp Glu Leu Pro Asn Tyr Cys Phe Pro
275 280 285

Leu Gly Gly Ile Gly Ile Thr Asp Thr Tyr Gln Ala Ile Lys Ala Ala
290 295 300

Asn Gly Gly Asp Ala Thr Thr Trp Ser Ala Asp Asn Thr Phe Ala Asp
305 310 315 320

Arg

<210> 2
<211> 961
<212> PRT
<213> Artificial Sequence

<220>
<223> BZ1 hexon

<400> 2

Met Ala Thr Pro Ser Met Met Pro Gln Trp Ser Tyr Met His Ile Ser
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Gly Gln Asp Ala Ser Glu Tyr Leu Ser Pro Gly Leu Val Gln Phe Ala
20 25 30

Arg Ala Thr Asp Thr Tyr Phe Asn Met Ser Asn Lys Phe Arg Asn Pro
35 40 45

Thr Val Ala Pro Thr His Asp Val Thr Thr Asp Arg Ser Gln Arg Leu
50 55 60

Thr Leu Arg Phe Ile Pro Val Asp Arg Glu Asp Thr Ala Tyr Ser Tyr
65 70 75 80

Lys Ala Arg Phe Thr Leu Ala Val Gly Asp Asn Arg Val Leu Asp Met
85 90 95

Ala Ser Thr Tyr Phe Asp Ile Arg Gly Val Leu Asp Arg Gly Pro Thr
100 105 110

Phe Lys Pro Tyr Ser Gly Thr Ala Tyr Asn Ser Leu Ala Pro Lys Gly
115 120 125

Ala Pro Asn Ser Cys Glu Trp Glu Glu Glu Thr Gln Asn Glu Val Gln
130 135 140

Ala Asn Glu Glu Gln Leu Ala Glu Glu Glu Asp Glu Glu Met Ala Gln
145 150 155 160

Glu Asp Gln Gln Pro Thr Lys Lys Thr His Val Tyr Ala Gln Ala Pro
165 170 175

Leu Ser Gly Glu Gln Ile Thr Lys Asp Gly Leu Gln Ile Gly Ala Glu
180 185 190

Val Thr Gly Glu Thr Ser Lys Pro Ile Phe Ala Asp Lys Thr Phe Gln
195 200 205

Pro Glu Pro Gln Ile Gly Glu Ser Gln Trp Asn Glu Ala Asp Ala Thr
210 215 220

Val Ala Gly Gly Arg Val Leu Lys Lys Thr Thr Pro Met Lys Pro Cys
225 230 235 240

Tyr Gly Ser Tyr Ala Arg Pro Thr Asn Ala Asn Gly Gly Gln Gly Ile
245 250 255

Leu Glu Ala Asn Ala Lys Gly Glu Leu Glu Ser Lys Val Glu Met Gln
260 265 270

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

Leu Lys Pro Lys Val Val Leu Tyr Ser Glu Asp Val Asn Leu Glu Ser
290 295 300

Pro Asp Thr His Leu Ser Tyr Lys Pro Lys Lys Asp Asp Val Asn Ala
305 310 315 320

Lys Ile Met Leu Gly Gln Gln Ala Met Pro Asn Arg Pro Asn Leu Ile
325 330 335

Gly Phe Arg Asp Asn Phe Ile Gly Leu Met Tyr Tyr Asn Ser Thr Gly
340 345 350

Asn Met Gly Val Leu Ala Gly Gln Ala Ser Gln Leu Asn Ala Val Val
355 360 365

Asp Leu Gln Asp Arg Asn Thr Glu Leu Ser Tyr Gln Leu Met Leu Asp
370 375 380

Ser Ile Gly Asp Arg Thr Arg Tyr Phe Ser Met Trp Asn Gln Ala Val
385 390 395 400

Asp Ser Tyr Asp Pro Asp Val Arg Ile Ile Glu Asn His Gly Val Glu
405 410 415

Asp Glu Leu Pro Asn Tyr Cys Phe Pro Leu Gly Gly Ile Gly Ile Thr
420 425 430

Asp Thr Tyr Gln Ala Ile Lys Ala Ala Asn Gly Gly Asp Ala Thr Thr
435 440 445

Trp Ser Ala Asp Asn Thr Phe Ala Asp Arg Asn Glu Ile Gly Val Gly
450 455 460

Asn Asn Phe Ala Met Glu Ile Asn Ile Gln Ala Asn Leu Trp Arg Asn
465 470 475 480

Phe Leu Tyr Ala Asn Val Gly Leu Tyr Leu Pro Asp Lys Leu Lys Tyr
485 490 495

Asn Pro Thr Asn Val Asp Ile Ser Asp Asn Pro Asn Thr Tyr Asp Tyr
500 505 510

Met Asn Lys Arg Val Val Ala Pro Gly Leu Val Asp Cys Phe Val Asn
515 520 525

Val Gly Ala Arg Trp Ser Leu Asp Tyr Met Asp Asn Val Asn Pro Phe
530 535 540

Asn His His Arg Asn Ala Gly Leu Arg Tyr Arg Ser Met Ile Leu Gly
545 550 555 560

Asn Gly Arg Tyr Val Pro Phe His Ile Gln Val Pro Gln Lys Phe Phe
565 570 575

Ala Ile Lys Asn Leu Leu Leu Leu Pro Gly Ser Tyr Thr Tyr Glu Trp
580 585 590

Asn Phe Arg Lys Asp Val Asn Met Val Leu Gln Ser Ser Leu Gly Asn
595 600 605

Asp Leu Arg Val Asp Gly Ala Ser Ile Lys Phe Asp Ser Ile Thr Leu
610 615 620

Tyr Ala Thr Phe Phe Pro Met Ala His Asn Thr Ala Ser Thr Leu Glu
625 630 635 640

Ala Met Leu Arg Asn Asp Thr Asn Asp Gln Ser Phe Asn Asp Tyr Leu
645 650 655

Ser Gly Ala Asn Met Leu Tyr Pro Ile Pro Ala Lys Ala Thr Asn Val
660 665 670

Pro Ile Ser Ile Pro Ser Arg Asn Trp Ala Ala Phe Arg Gly Trp Ala
675 680 685

Phe Thr Arg Leu Lys Thr Lys Glu Thr Pro Ser Leu Gly Ser Gly Phe
690 695 700

Asp Pro Tyr Phe Val Tyr Ser Gly Ser Ile Pro Tyr Leu Asp Gly Thr
705 710 715 720

Phe Tyr Leu Asn His Thr Phe Lys Lys Ile Ser Ile Met Tyr Asp Ser
725 730 735

Ser Val Ser Trp Pro Gly Asn Asp Arg Leu Leu Thr Pro Asn Glu Phe
740 745 750

Glu Val Lys Arg Ala Val Asp Gly Glu Gly Tyr Asn Val Ala Gln Cys
755 760 765

Asn Met Thr Lys Asp Trp Phe Leu Val Gln Met Leu Ala Asn Tyr Asn
770 775 780

Ile Gly Tyr Gln Gly Phe Tyr Ile Pro Glu Ser Tyr Lys Asp Arg Met
785 790 795 800

Tyr Ser Phe Phe Arg Asn Phe Gln Pro Met Ser Arg Gln Val Val Asp
805 810 815

Glu Thr Asn Tyr Lys Asp Tyr Gln Ala Ile Gly Ile Thr His Gln His
820 825 830

Asn Asn Ser Gly Phe Val Gly Tyr Leu Ala Pro Thr Met Arg Glu Gly
835 840 845

Gln Ala Tyr Pro Ala Asn Phe Pro Tyr Pro Leu Ile Gly Lys Thr Ala
850 855 860

Val Asp Ser Val Thr Gln Lys Lys Phe Leu Cys Asp Arg Thr Leu Trp
865 870 875 880

Arg Ile Pro Phe Ser Ser Asn Phe Met Ser Met Gly Ala Leu Thr Asp
885 890 895

Leu Gly Gln Asn Leu Leu Tyr Ala Asn Ser Ala His Ala Leu Asp Met
900 905 910

Thr Phe Glu Val Asp Pro Met Asp Glu Pro Thr Leu Leu Tyr Ile Val
915 920 925

Phe Glu Val Phe Asp Val Val Arg Val His Gln Pro His Arg Gly Val
930 935 940

Ile Glu Thr Val Tyr Leu Arg Thr Pro Phe Ser Ala Gly Asn Ala Thr
945 950 955 960

Thr

<210> 3
<211> 543
<212> PRT
<213> Artificial Sequence

<220>
<223> BZ28 fiber

<400> 3

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Tyr Asp Thr Glu Asn Gly Pro Pro Ser Val Pro Phe Leu Thr Pro Pro
20 25 30

Phe Val Ser Pro Asp Gly Phe Gln Glu Ser Pro Pro Gly Val Leu Ser
35 40 45

Leu Asn Leu Ala Glu Pro Leu Val Thr Ser His Gly Met Leu Ala Leu
50 55 60

Lys Met Gly Ser Gly Leu Ser Leu Asp Asp Ala Gly Asn Leu Thr Ser
65 70 75 80

Gln Asp Val Thr Thr Thr Thr Pro Pro Leu Lys Lys Thr Lys Thr Asn
85 90 95

Leu Ser Leu Glu Thr Ser Ala Pro Leu Thr Val Ser Thr Ser Gly Ala
100 105 110

Leu Thr Leu Ala Ala Ala Val Pro Leu Ala Val Ala Gly Thr Ser Leu
115 120 125

Thr Met Gln Ser Glu Ala Pro Leu Thr Val Gln Asp Ala Lys Leu Thr
130 135 140

Leu Ala Thr Lys Gly Pro Leu Thr Val Ser Glu Gly Lys Leu Ala Leu
145 150 155 160

Gln Thr Ser Ala Pro Leu Thr Ala Ala Asp Ser Ser Ala Leu Thr Val
165 170 175

Ser Ala Thr Pro Pro Ile Ser Val Ser Ser Gly Ser Leu Gly Leu Asp
180 185 190

Met Glu Asp Pro Met Tyr Thr His Asp Gly Lys Leu Gly Ile Arg Ile
195 200 205

Gly Gly Pro Leu Arg Val Val Asp Ser Leu His Thr Leu Thr Val Val
210 215 220

Thr Gly Asn Gly Ile Ala Val Asp Asn Asn Ala Leu Gln Thr Arg Val
225 230 235 240

Thr Gly Ala Leu Gly Tyr Asp Thr Ser Gly Asn Leu Gln Leu Arg Ala
245 250 255

Ala Gly Gly Met Arg Ile Asp Ala Asn Gly Gln Leu Ile Leu Asp Val
260 265 270

Ala Tyr Pro Phe Asp Ala Gln Asn Asn Leu Ser Leu Arg Leu Gly Gln
275 280 285

Gly Pro Leu Tyr Val Asn Thr Asp His Asn Leu Asp Leu Asn Cys Asn
290 295 300

Arg Gly Leu Thr Thr Thr Thr Thr Asn Asn Thr Lys Lys Leu Glu Thr
305 310 315 320

Lys Ile Gly Ser Gly Leu Asp Tyr Asp Thr Asn Gly Ala Val Ile Ile
325 330 335

Lys Leu Gly Thr Gly Val Ser Phe Asp Ser Thr Gly Ala Leu Thr Val
340 345 350

Gly Asn Thr Gly Asp Asp Lys Leu Thr Leu Trp Thr Thr Pro Asp Pro
355 360 365

Ser Pro Asn Cys Arg Ile His Ala Asp Lys Asp Cys Lys Phe Thr Leu
370 375 380

Val Leu Thr Lys Cys Gly Ser Gln Ile Leu Ala Ser Val Ala Ala Leu
385 390 395 400

Ala Val Ser Gly Asn Leu Ala Ser Ile Thr Gly Thr Val Ala Ser Val
405 410 415

Thr Ile Phe Leu Arg Phe Asp Gln Asn Gly Val Leu Met Glu Asn Ser
420 425 430

Ser Leu Asp Lys Gln Tyr Trp Asn Phe Arg Asn Gly Asn Ser Thr Asn
435 440 445

Ala Thr Pro Tyr Thr Asn Ala Val Gly Phe Met Pro Asn Leu Ala Ala
450 455 460

Tyr Pro Lys Thr Gln Ser Gln Thr Ala Lys Asn Asn Ile Val Ser Gln
465 470 475 480

Val Tyr Leu Asn Gly Asp Lys Ser Lys Pro Met Thr Leu Thr Ile Thr
485 490 495

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

Ser Met Ser Phe Thr Trp Ala Trp Glu Ser Gly Gln Tyr Ala Thr Glu
515 520 525

Thr Phe Ala Thr Asn Ser Phe Thr Phe Ser Tyr Ile Ala Glu Gln
530 535 540

<210> 4
<211> 580
<212> PRT
<213> Artificial Sequence

<220>
<223> BZ1 fiber

<400> 4

Met Lys Arg Ala Arg Ser Ser Asp Glu Thr Phe Asn Pro Val Tyr Pro
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Tyr Asp Thr Glu Ile Ala Pro Thr Ser Val Pro Phe Leu Thr Pro Pro
20 25 30

Phe Val Ser Ser Ala Gly Met Gln Glu Asn Pro Ala Gly Val Leu Ser
35 40 45

Leu His Leu Ser Glu Pro Leu Thr Thr His Asn Gly Ala Leu Thr Leu
50 55 60

Lys Met Gly Gly Gly Leu Thr Leu Asp Lys Glu Gly Asn Leu Thr Ser
65 70 75 80

Gln Asn Ile Thr Ser Val Asp Pro Pro Leu Lys Lys Ser Lys Asn Asn
85 90 95

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

Thr Leu Phe Ala Thr Pro Pro Leu Ala Val Ser Gly Asp Asn Leu Thr
115 120 125

Val Gln Ser Gln Ala Pro Phe Thr Leu Glu Asp Ser Lys Leu Thr Leu
130 135 140

Ala Thr Lys Gly Pro Leu Thr Val Ser Glu Gly Lys Leu Val Leu Glu
145 150 155 160

Thr Glu Ala Pro Leu His Ala Ser Asp Ser Ser Ser Leu Gly Leu Ser
165 170 175

Val Thr Ala Pro Leu Ser Ile Asn Asn Asp Ser Leu Gly Leu Asp Met
180 185 190

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

Ala Pro Leu Thr Val Ala Glu Gly Ile Asn Ala Leu Ala Val Ala Thr
210 215 220

Gly Asn Gly Ile Gly Leu Asn Glu Thr Asn Thr His Leu Gln Ala Lys
225 230 235 240

Leu Val Ala Pro Leu Gly Phe Asp Thr Asn Gly Asn Ile Lys Leu Ser
245 250 255

Val Ala Gly Gly Met Arg Leu Asn Asn Asn Thr Leu Ile Leu Asp Val
260 265 270

Asn Tyr Pro Phe Glu Ala Gln Gly Gln Leu Ser Leu Arg Val Gly Ser
275 280 285

Gly Pro Leu Tyr Val Asp Ser Ser Ser His Asn Leu Thr Ile Arg Cys
290 295 300

Leu Arg Gly Leu Tyr Val Thr Ser Ser Asn Asn Gln Asn Gly Leu Glu
305 310 315 320

Ala Asn Ile Lys Leu Thr Lys Gly Leu Val Tyr Asp Gly Asn Ala Ile
325 330 335

Ala Val Asn Val Gly Lys Gly Leu Glu Tyr Ser Pro Thr Gly Thr Thr
340 345 350

Glu Lys Pro Ile Gln Thr Lys Ile Gly Leu Gly Met Glu Tyr Asp Thr
355 360 365

Glu Gly Ala Met Met Thr Lys Leu Gly Ser Gly Leu Ser Phe Asp Asn
370 375 380

Ser Gly Ala Ile Val Val Gly Asn Lys Asn Asp Asp Arg Leu Thr Leu
385 390 395 400

Trp Thr Thr Pro Asp Pro Ser Pro Asn Cys Gln Ile Tyr Ser Glu Lys
405 410 415

Asp Ala Lys Leu Thr Leu Val Leu Thr Lys Cys Gly Ser Gln Val Val
420 425 430

Gly Thr Val Ser Ile Ala Ala Leu Lys Gly Ser Leu Val Pro Ile Thr
435 440 445

Ser Ala Ile Ser Val Val Gln Val Tyr Leu Arg Phe Asp Glu Asn Gly
450 455 460

Val Leu Met Ser Asn Ser Ser Leu Asn Gly Glu Tyr Trp Asn Phe Arg
465 470 475 480

Asn Gly Asp Ser Thr Asn Gly Thr Pro Tyr Thr Asn Ala Val Gly Phe
485 490 495

Met Pro Asn Leu Leu Ala Tyr Pro Lys Gly Gln Thr Thr Thr Ala Lys
500 505 510

Ser Asn Ile Val Ser Gln Val Tyr Met Asn Gly Asp Asp Thr Lys Pro
515 520 525

Met Thr Phe Thr Ile Asn Phe Asn Gly Leu Ser Glu Thr Gly Asp Thr
530 535 540

Pro Val Ser Lys Tyr Ser Met Thr Phe Ser Trp Arg Trp Pro Asn Gly
545 550 555 560

Ser Tyr Ile Gly His Asn Phe Val Thr Asn Ser Phe Thr Phe Ser Tyr
565 570 575

Ile Ala Gln Glu
580

<210> 5
<211> 579
<212> PRT
<213> Artificial Sequence

<220>
<223> BZ28 partial hexon

<400> 5

Lys Phe Arg Asn Pro Thr Val Ala Pro Thr His Asp Val Thr Thr Asp
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Arg Ser Gln Arg Leu Thr Leu Arg Phe Ile Pro Val Asp Arg Glu Asp
20 25 30

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

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

Asp Arg Gly Pro Thr Phe Lys Pro Tyr Ser Gly Thr Ala Tyr Asn Ser
65 70 75 80

Leu Ala Pro Lys Gly Ala Pro Asn Ser Cys Glu Trp Glu Gln Glu Glu
85 90 95

Thr Gln Ala Val Glu Glu Ala Ala Glu Glu Glu Glu Asp Ala Asp
100 105 110

Gly Gln Ala Glu Glu Glu Gln Ala Ala Thr Lys Lys Thr His Val Tyr
115 120 125

Ala Gln Ala Pro Leu Ser Gly Glu Lys Ile Ser Lys Asp Gly Leu Gln
130 135 140

Ile Gly Thr Asp Ala Thr Ala Thr Glu Gln Lys Pro Ile Tyr Ala Asp
145 150 155 160

Pro Thr Phe Gln Pro Glu Pro Gln Ile Gly Glu Ser Gln Trp Asn Glu
165 170 175

Ala Asp Ala Thr Val Ala Gly Gly Arg Val Leu Lys Lys Ser Thr Pro
180 185 190

Met Lys Pro Cys Tyr Gly Ser Tyr Ala Arg Pro Thr Asn Ala Asn Gly
195 200 205

Gly Gln Gly Val Leu Thr Ala Asn Ala Gln Gly Gln Leu Glu Ser Gln
210 215 220

Val Glu Met Gln Phe Phe Ser Thr Ser Glu Asn Ala Arg Asn Glu Ala
225 230 235 240

Asn Asn Ile Gln Pro Lys Leu Val Leu Tyr Ser Glu Asp Val His Met
245 250 255

Glu Thr Pro Asp Thr His Leu Ser Tyr Lys Pro Ala Lys Ser Asp Asp
260 265 270

Asn Ser Lys Ile Met Leu Gly Gln Gln Ser Met Pro Asn Arg Pro Asn
275 280 285

Tyr Ile Gly Phe Arg Asp Asn Phe Ile Gly Leu Met Tyr Tyr Asn Ser
290 295 300

Thr Gly Asn Met Gly Val Leu Ala Gly Gln Ala Ser Gln Leu Asn Ala
305 310 315 320

Val Val Asp Leu Gln Asp Arg Asn Thr Glu Leu Ser Tyr Gln Leu Leu
325 330 335

Leu Asp Ser Met Gly Asp Arg Thr Arg Tyr Phe Ser Met Trp Asn Gln
340 345 350

Ala Val Asp Ser Tyr Asp Pro Asp Val Arg Ile Ile Glu Asn His Gly
355 360 365

Thr Glu Asp Glu Leu Pro Asn Tyr Cys Phe Pro Leu Gly Gly Ile Gly
370 375 380

Val Thr Asp Thr Tyr Gln Ala Val Lys Thr Asn Asn Gly Asn Asn Gly
385 390 395 400

Gly Gln Val Thr Trp Thr Lys Asp Glu Thr Phe Ala Asp Arg Asn Glu
405 410 415

Ile Gly Val Gly Asn Asn Phe Ala Met Glu Ile Asn Leu Ser Ala Asn
420 425 430

Leu Trp Arg Asn Phe Leu Tyr Ser Asn Val Ala Leu Tyr Leu Pro Asp
435 440 445

Lys Leu Lys Tyr Asn Pro Ser Asn Val Asp Ile Ser Asp Asn Pro Asn
450 455 460

Thr Tyr Asp Tyr Met Asn Lys Arg Val Val Ala Pro Gly Leu Val Asp
465 470 475 480

Cys Tyr Ile Asn Leu Gly Ala Arg Trp Ser Leu Asp Tyr Met Asp Asn
485 490 495

Val Asn Pro Phe Asn His His Arg Asn Ala Gly Leu Arg Tyr Arg Ser
500 505 510

Met Leu Leu Gly Asn Gly Arg Tyr Val Pro Phe His Ile Gln Val Pro
515 520 525

Gln Lys Phe Phe Ala Ile Lys Asn Leu Leu Leu Leu Pro Gly Ser Tyr
530 535 540

Thr Tyr Glu Trp Asn Phe Arg Lys Asp Val Asn Met Val Leu Gln Ser
545 550 555 560

Ser Leu Gly Asn Asp Leu Arg Val Asp Gly Ala Ser Ile Lys Phe Glu
565 570 575

Ser Ile Cys

<210> 6
<211> 37204
<212> DNA
<213> Artificial Sequence

<220>
<223> BZ1 genome

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35 40 45

Ile Thr Gly Thr Val Ala Ser Val Thr Ile Phe Leu Arg Phe Asp Gln
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