

SEQUENCE LISTING

<110> IMCHECK THERAPEUTICS
INSERM
CNRS
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<120> ANTIBODIES HAVING SPECIFICITY FOR BTN2 AND USES THEREOF

<130> BCT200062 QT

<150> EP19305345.1

<151> 2019-03-20

<150> EP19219691.3

<151> 2019-12-24

<160> 35

<170> PatentIn version 3.5

<210> 1

<211> 136

<212> PRT

<213> Homo sapiens

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

Val Ser Ser Ser Gly Tyr Ser Tyr Met His Trp Tyr Gln Gln Lys Pro
 50 55 60

Gly Gln Pro Pro Lys Leu Leu Ile Tyr Leu Ala Ser Asn Leu Glu Ser
 65 70 75 80

Gly Val Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 85 90 95

Leu Asn Ile His Pro Val Glu Glu Glu Asp Ala Ala Thr Tyr Tyr Cys
 100 105 110

Gln His Ser Arg Asp Leu Pro Tyr Ala Phe Gly Gly Gly Thr Lys Leu
 115 120 125

Glu Ile Lys
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caacagaaac caggacagcc acccaaactc ctcatctatc ttgcatccaa cctagaatct 240
gggggtccctg ccaggttcag tggcagtggg tctgggacag acttcaccct caacatccat 300
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Val Gly Pro Thr Asp Pro Ile Leu Ala Thr Val Gly Glu Asn Thr Thr
35 40 45

Leu Arg Cys His Leu Ser Pro Glu Lys Asn Ala Glu Asp Met Glu Val
50 55 60

Arg Trp Phe Arg Ser Gln Phe Ser Pro Ala Val Phe Val Tyr Lys Gly
65 70 75 80

Gly Arg Glu Arg Thr Glu Glu Gln Met Glu Glu Tyr Arg Gly Arg Thr
85 90 95

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

His Asn Ile Thr Ala Gln Glu Asn Gly Thr Tyr Arg Cys Tyr Phe Gln
115 120 125

Glu Gly Arg Ser Tyr Asp Glu Ala Ile Leu His Leu Val Val Ala Gly
130 135 140

Leu Gly Ser Lys Pro Leu Ile Ser Met Arg Gly His Glu Asp Gly Gly
145 150 155 160

Ile Arg Leu Glu Cys Ile Ser Arg Gly Trp Tyr Pro Lys Pro Leu Thr
165 170 175

Val Trp Arg Asp Pro Tyr Gly Gly Val Ala Pro Ala Leu Lys Glu Val
180 185 190

Ser Met Pro Asp Ala Asp Gly Leu Phe Met Val Thr Thr Ala Val Ile
195 200 205

Ile Arg Asp Lys Ser Val Arg Asn Met Ser Cys Ser Ile Asn Asn Thr
210 215 220

Leu Leu Gly Gln Lys Lys Glu Ser Val Ile Phe Ile Pro Glu Ser Phe
225 230 235 240

Met Pro Ser Val Ser Pro Cys Ala Val Ala Leu Pro Ile Ile Val Val
245 250 255

Ile Leu Met Ile Pro Ile Ala Val Cys Ile Tyr Trp Ile Asn Lys Leu
260 265 270

Gln Lys Glu Lys Lys Ile Leu Ser Gly Glu Lys Glu Phe Glu Arg Glu
275 280 285

Thr Arg Glu Ile Ala Leu Lys Glu Leu Glu Lys Glu Arg Val Gln Lys
290 295 300

Glu Glu Glu Leu Gln Val Lys Glu Lys Leu Gln Glu Glu Leu Arg Trp
305 310 315 320

Arg Arg Thr Phe Leu His Ala Val Asp Val Val Leu Asp Pro Asp Thr
325 330 335

Ala His Pro Asp Leu Phe Leu Ser Glu Asp Arg Arg Ser Val Arg Arg
340 345 350

Cys Pro Phe Arg His Leu Gly Glu Ser Val Pro Asp Asn Pro Glu Arg
355 360 365

Phe Asp Ser Gln Pro Cys Val Leu Gly Arg Glu Ser Phe Ala Ser Gly
370 375 380

Lys His Tyr Trp Glu Val Glu Val Glu Asn Val Ile Glu Trp Thr Val
385 390 395 400

Gly Val Cys Arg Asp Ser Val Glu Arg Lys Gly Glu Val Leu Leu Ile

405

410

415

Pro Gln Asn Gly Phe Trp Thr Leu Glu Met His Lys Gly Gln Tyr Arg
 420 425 430

Ala Val Ser Ser Pro Asp Arg Ile Leu Pro Leu Lys Glu Ser Leu Cys
 435 440 445

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

Asn Met Arg Asp Arg Ser His Ile Tyr Thr Cys Pro Arg Ser Ala Phe
 465 470 475 480

Ser Val Pro Val Arg Pro Phe Phe Arg Leu Gly Cys Glu Asp Ser Pro
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Glu Glu Gly Leu Thr Leu His Arg Val Gly Thr His Gln Ser Leu
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<400> 18

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

Glu Asn Thr Thr Leu Arg Cys His Leu Ser Pro Glu Lys Asn Ala Glu
 50 55 60

Asp Met Glu Val Arg Trp Phe Arg Ser Gln Phe Ser Pro Ala Val Phe
65 70 75 80

Val Tyr Lys Gly Gly Arg Glu Arg Thr Glu Glu Gln Met Glu Glu Tyr
85 90 95

Arg Gly Arg Ile Thr Phe Val Ser Lys Asp Ile Asn Arg Gly Ser Val
100 105 110

Ala Leu Val Ile His Asn Val Thr Ala Gln Glu Asn Gly Ile Tyr Arg
115 120 125

Cys Tyr Phe Gln Glu Gly Arg Ser Tyr Asp Glu Ala Ile Leu Arg Leu
130 135 140

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

Glu Asp Gly Ser Ile Trp Leu Glu Cys Ile Ser Gly Gly Trp Tyr Pro
165 170 175

Glu Pro Leu Thr Val Trp Arg Asp Pro Tyr Gly Glu Val Val Pro Ala
180 185 190

Leu Lys Glu Val Ser Ile Ala Asp Ala Asp Gly Leu Phe Met Val Thr
195 200 205

Thr Ala Val Ile Ile Arg Asp Lys Tyr Val Arg Asn Val Ser Cys Ser
210 215 220

Val Asn Asn Thr Leu Leu Gly Gln Glu Lys Glu Thr Val Ile Phe Ile
225 230 235 240

Pro Glu Ser Phe Met Pro Ser Ala Ser Pro Trp Met Val Ala Leu Ala
245 250 255

Val Ile Leu Thr Ala Ser Pro Trp Met Val Ser Met Thr Val Ile Leu
260 265 270

Ala Val Phe Ile Ile Phe Met Ala Val Ser Ile Cys Cys Ile Lys Lys
275 280 285

Leu Gln Arg Glu Lys Lys Ile Leu Ser Gly Glu Lys Lys Val Glu Gln
290 295 300

Glu Glu Lys Glu Ile Ala Gln Gln Leu Gln Glu Glu Leu Arg Trp Arg
305 310 315 320

Arg Thr Phe Leu His Ala Ala Asp Val Val Leu Asp Pro Asp Thr Ala
325 330 335

His Pro Glu Leu Phe Leu Ser Glu Asp Arg Arg Ser Val Arg Arg Gly
340 345 350

Pro Tyr Arg Gln Arg Val Pro Asp Asn Pro Glu Arg Phe Asp Ser Gln
355 360 365

Pro Cys Val Leu Gly Trp Glu Ser Phe Ala Ser Gly Lys His Tyr Trp
370 375 380

Glu Val Glu Val Glu Asn Val Met Val Trp Thr Val Gly Val Cys Arg
385 390 395 400

His Ser Val Glu Arg Lys Gly Glu Val Leu Leu Ile Pro Gln Asn Gly
405 410 415

Phe Trp Thr Leu Glu Met Phe Gly Asn Gln Tyr Arg Ala Leu Ser Ser
420 425 430

Pro Glu Arg Ile Leu Pro Leu Lys Glu Ser Leu Cys Arg Val Gly Val
435 440 445

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

Arg Ser His Ile Tyr Thr Cys Pro Arg Ser Ala Phe Thr Val Pro Val
465 470 475 480

Arg Pro Phe Phe Arg Leu Gly Ser Asp Asp Ser Pro Ile Phe Ile Cys
485 490 495

Pro Ala Leu Thr Gly Ala Ser Gly Val Met Val Pro Glu Glu Gly Leu
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Lys Leu His Arg Val Gly Thr His Gln Ser Leu
515 520

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<400> 19

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Val His Ser Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys
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Pro Gly Ala Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Ser Phe
35 40 45

Thr Val Tyr Tyr Met Leu Trp Val Lys Gln Ser Pro Glu Lys Ser Leu
50 55 60

Glu Trp Ile Gly Glu Ile Asn Pro Ser Thr Gly Gly Thr Thr Tyr Asn
65 70 75 80

Gln Lys Phe Lys Ala Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser
85 90 95

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

Ser Ser Ile Ser Ser Asn Tyr Leu His Trp Tyr Arg His Lys Pro Gly
50 55 60

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

Val Pro Gly Arg Phe Ser Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu
85 90 95

Thr Ile Gly Thr Met Glu Ala Glu Asp Val Ala Thr Tyr Tyr Cys Gln
100 105 110

Gln Gly Ser Ser Ile Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu Glu
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Ile Lys
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<212> PRT

<213> Mus musculus

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<210> 22

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<212> PRT

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<213> Mus musculus

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<210> 24

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<212> PRT

<213> Mus musculus

<400> 24

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<212> PRT

<213> Mus musculus

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Arg Thr Ser Asn Leu Ala Ser
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<210> 26

<211> 9

<212> PRT

<213> Mus musculus

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tgcaaggctt ctggttactc attcactgtc tactacatgc tctgggtgaa acaaagtcct 180
gaaaagagcc ttgagtggat tggagagatt aatcctagca ctggtggtac tacctacaac 240
cagaagttca aggccaaggc cacattgact gtagacaaat cctccagcac agcctacatg 300
cagctcaaga gcctgacatc tgaggactct gcagtctatt actgtgcaag gggcccagagc 360
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atcactatca cctgcagtgc cacctctagt ataagttcca attacttgca ttggtatcga 180
cataagccag gattctcccc taaactcttg atttatagga catccaatct ggcttctgga 240
gtcccaggtc gcttcagtgg cagtgggtct gggacctctt actctctcac aattggcacc 300
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<212> PRT
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<400> 35

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Ile Leu Leu Leu Leu Leu Leu Arg Leu Cys Ala Leu Val Ser Ala Gln
35 40 45

Phe Thr Val Val Gly Pro Thr Asp Pro Ile Leu Ala Met Val Gly Glu
50 55 60

Asn Thr Thr Leu Arg Cys His Leu Ser Pro Glu Lys Asn Ala Glu Asp
65 70 75 80

Met Glu Val Arg Trp Phe Arg Ser Gln Phe Ser Pro Ala Val Phe Val
85 90 95

Tyr Lys Gly Gly Arg Glu Arg Thr Glu Glu Gln Met Glu Glu Tyr Arg
100 105 110

Gly Arg Thr Thr Phe Val Ser Lys Asp Ile Ser Arg Gly Ser Val Ala
115 120 125

Leu Ile Ile His Asn Val Thr Ala Gln Glu Asn Gly Thr Tyr Arg Cys
130 135 140

Tyr Phe Gln Glu Gly Arg Ser Tyr Asp Glu Ala Ile Leu His Leu Met
145 150 155 160

Val Ala Gly Leu Gly Ser Lys Pro Leu Val Glu Met Arg Gly His Glu
165 170 175

Asp Gly Gly Ile Arg Leu Glu Cys Ile Ser Arg Gly Trp Tyr Pro Lys
180 185 190

Pro Leu Thr Val Trp Arg Asp Pro Tyr Gly Arg Val Val Pro Ala Leu
195 200 205

Lys Glu Val Phe Pro Pro Asp Thr Asp Gly Leu Phe Met Val Thr Thr
210 215 220

Ala Val Ile Ile Arg Asp Lys Ser Met Arg Asn Met Ser Cys Ser Ile

225		230		235		240									
Ser	Asp	Thr	Leu	Leu	Gly	Gln	Lys	Lys	Glu	Ser	Val	Ile	Phe	Ile	Pro
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Glu	Ser	Phe	Met	Pro	Ser	Val	Ser	Pro	Cys	Val	Val	Ala	Leu	Pro	Ile
			260					265					270		
Ile	Val	Val	Phe	Leu	Met	Ile	Ile	Ile	Ala	Val	Cys	Ile	Tyr	Trp	Ile
		275					280					285			
Asn	Arg	Leu	Gln	Lys	Glu	Thr	Lys	Ile	Leu	Ser	Gly	Glu	Lys	Glu	Ser
	290						295				300				
Glu	Arg	Lys	Thr	Arg	Glu	Ile	Ala	Val	Lys	Glu	Leu	Lys	Lys	Glu	Arg
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Val	Gln	Lys	Glu	Lys	Glu	Leu	Gln	Val	Lys	Glu	Gln	Leu	Gln	Glu	Glu
				325					330					335	
Leu	Arg	Trp	Arg	Arg	Thr	Val	Leu	His	Ala	Val	Asp	Val	Val	Leu	Asp
			340					345					350		
Pro	Asp	Thr	Ala	His	Pro	Asp	Leu	Leu	Leu	Ser	Glu	Asp	Arg	Arg	Ser
		355					360					365			
Val	Arg	Arg	Cys	Pro	Leu	Gly	His	Leu	Gly	Glu	Ser	Val	Pro	Asp	Asn
	370					375					380				
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385					390					395					400
Ala	Ser	Gly	Lys	His	Tyr	Trp	Glu	Val	Glu	Val	Glu	Asn	Val	Ile	Glu
				405					410					415	
Trp	Thr	Val	Gly	Val	Cys	Arg	Asp	Ser	Val	Glu	Arg	Lys	Glu	Glu	Val
			420					425					430		
Leu	Leu	Arg	Pro	Arg	Asn	Gly	Phe	Trp	Thr	Leu	Glu	Met	Cys	Lys	Gly
		435					440					445			

Gln Tyr Arg Ala Leu Ser Ser Pro Lys Arg Ile Leu Pro Leu Lys Glu
450 455 460

Ser Leu Cys Arg Val Gly Val Phe Leu Asp Tyr Glu Ala Gly Asp Val
465 470 475 480

Ser Phe Tyr Asn Met Arg Asp Arg Ser His Ile Tyr Thr Cys Pro Arg
485 490 495

Leu Ala Phe Ser Val Pro Val Arg Pro Phe Phe Arg Ile Gly Ser Asp
500 505 510

Asp Ser Pro Ile Phe Ile Cys Pro Ala Leu Thr Gly Ala Ser Gly Ile
515 520 525

Thr Val Pro Glu Glu Gly Leu Ile Leu His Arg Val Gly Thr Asn Gln
530 535 540

Ser Leu Met Pro Val Gly Thr Arg Cys Tyr Gly His Gly Met Arg Pro
545 550 555 560

Thr Gly Phe Ile Arg Met Arg Glu Glu Arg Gly Ile His Arg Thr Thr
565 570 575

Arg Glu Glu Arg Glu Pro Asp Met Gln Asn Phe Asp Leu Gly Ala His
580 585 590

Trp Ser Asn Asn Leu Pro Ser Ala Arg Ser Arg Glu Phe Leu Asn Ser
595 600 605

Asp Leu Val Pro Asp His Ser Leu Glu Ser Pro Val Thr Pro Gly Leu
610 615 620

Ala Asn Lys Thr Gly Glu Pro Gln Ala Glu Val Thr Cys Leu Cys Phe
625 630 635 640

Ser Leu Pro Ser Ser Glu Leu Arg Ala Phe Pro Ser Thr Ala Thr Asn
645 650 655

His Asn His Lys Ala Thr Ala Leu Gly Ser Asp Leu His Ile Glu Val

660

665

670

Lys Gly Tyr Glu Asp Gly Gly Ile His Leu Glu Cys Arg Ser Thr Gly
 675 680 685

Trp Tyr Pro Gln Pro Gln Ile Gln Trp Ser Asn Thr Lys Gly Gln His
 690 695 700

Ile Pro Ala Val Lys Ala Pro Val Val Ala Asp Gly Val Gly Leu Tyr
 705 710 715 720

Ala Val Ala Ala Ser Val Ile Met Arg Gly Ser Ser Gly Glu Gly Val
 725 730 735

Ser Cys Ile Ile Arg Asn Ser Leu Leu Gly Leu Glu Lys Thr Ala Ser
 740 745 750

Ile Ser Ile Thr Asp Pro Phe Phe Arg Asn Ala Gln Pro Trp Ile Ala
 755 760 765

Ala Leu Ala Gly Thr Leu Pro Ile Ser Leu Leu Leu Leu Ala Gly Ala
 770 775 780

Ser Tyr Phe Leu Trp Arg Gln Gln Lys Glu Lys Ile Ala Leu Ser Arg
 785 790 795 800

Glu Thr Glu Arg Glu Arg Glu Met Lys Glu Met Gly Tyr Ala Ala Thr
 805 810 815

Lys Gln Glu Ile Ser Leu Arg Gly Gly Glu Lys Ser Leu Ala Tyr His
 820 825 830

Gly Thr His Ile Ser Tyr Leu Ala Ala Pro Glu Arg Trp Glu Met Ala
 835 840 845

Val Phe Pro Asn Ser Gly Leu Pro Arg Cys Leu Leu Thr Leu Ile Leu
 850 855 860

Leu Gln Leu Pro Lys Leu Asp Ser Ala Pro Phe Asp Val Ile Gly Pro
 865 870 875 880

Pro Glu Pro Ile Leu Ala Val Val Gly Glu Asp Ala Glu Leu Pro Cys
885 890 895

Arg Leu Ser Pro Asn Ala Ser Ala Glu His Leu Glu Leu Arg Trp Phe
900 905 910

Arg Lys Lys Val Ser Pro Ala Val Leu Val His Arg Asp Gly Arg Glu
915 920 925

Gln Glu Ala Glu Gln Met Pro Glu Tyr Arg Gly Arg Ala Thr Leu Val
930 935 940

Gln Asp Gly Ile Ala Glu Gly Arg Val Ala Leu Arg Ile Arg Gly Val
945 950 955 960

Arg Val Ser Asp Asp Gly Glu Tyr Thr Cys Phe Phe Arg Glu Asp Gly
965 970 975

Ser Tyr Glu Glu Ala Leu Val His Leu Lys Val Ala Ala Leu Gly Ser
980 985 990

Asp Pro His Ile Ser Met Gln Val Gln Glu Asn Gly Glu Ile Trp Leu
995 1000 1005

Glu Cys Thr Ser Val Gly Trp Tyr Pro Glu Pro Gln Val Gln Trp
1010 1015 1020

Arg Thr Ser Lys Gly Glu Lys Phe Pro Ser Thr Ser Glu Ser Arg
1025 1030 1035

Asn Pro Asp Glu Glu Gly Leu Phe Thr Val Ala Ala Ser Val Ile
1040 1045 1050

Ile Arg Asp Thr Ser Val Lys Asn Val Ser Cys Tyr Ile Gln Asn
1055 1060 1065

Leu Leu Leu Gly Gln Glu Lys Glu Val Glu Ile Phe Ile Pro Gly
1070 1075 1080