

P50627PC_22Dec11_sequence listing_ST25
SEQUENCE LISTING

<110> Imperial Innovations Limited

<120> Treatment and screening

<130> ICOBV/P50627PC

<150> US 61/429877

<151> 2011-01-05

<160> 73

<170> PatentIn version 3.5

<210> 1

<211> 488

<212> PRT

<213> Homo sapiens

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35 40 45

His Ala Thr Arg His Gly Pro Ser Gln Asp Gly Asp Asn Thr Ile Phe
50 55 60

Lys Ala Trp Ala Lys Glu Thr Gly Lys Tyr Thr Glu Gly Val Asp Glu
65 70 75 80

Ala Asp Pro Ala Lys Trp Lys Ala Asn Leu Arg Cys Ala Leu Asn Lys
85 90 95

Ser Arg Asp Phe Arg Leu Ile Tyr Asp Gly Pro Arg Asp Met Pro Pro
100 105 110

Gln Pro Tyr Lys Ile Tyr Glu Val Cys Ser Asn Gly Pro Ala Pro Thr
115 120 125

Asp Ser Gln Pro Pro Glu Asp Tyr Ser Phe Gly Ala Gly Glu Glu Glu
130 135 140

Glu Glu Glu Glu Glu Leu Gln Arg Met Leu Pro Ser Leu Ser Leu Thr
145 150 155 160

Glu Asp Val Lys Trp Pro Pro Thr Leu Gln Pro Pro Thr Leu Gln Pro
165 170 175

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

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Pro Pro Gly Asn Pro Ala Gly Phe Arg Glu Leu Leu Ser Glu Val Leu
195 200 205

Glu Pro Gly Pro Leu Pro Ala Ser Leu Pro Pro Ala Gly Glu Gln Leu
210 215 220

Leu Pro Asp Leu Leu Ile Ser Pro His Met Leu Pro Leu Thr Asp Leu
225 230 235 240

Glu Ile Lys Phe Gln Tyr Arg Gly Arg Pro Pro Arg Ala Leu Thr Ile
245 250 255

Ser Asn Pro His Gly Cys Arg Leu Phe Tyr Ser Gln Leu Glu Ala Thr
260 265 270

Gln Glu Gln Val Glu Leu Phe Gly Pro Ile Ser Leu Glu Gln Val Arg
275 280 285

Phe Pro Ser Pro Glu Asp Ile Pro Ser Asp Lys Gln Arg Phe Tyr Thr
290 295 300

Asn Gln Leu Leu Asp Val Leu Asp Arg Gly Leu Ile Leu Gln Leu Gln
305 310 315 320

Gly Gln Asp Leu Tyr Ala Ile Arg Leu Cys Gln Cys Lys Val Phe Trp
325 330 335

Ser Gly Pro Cys Ala Ser Ala His Asp Ser Cys Pro Asn Pro Ile Gln
340 345 350

Arg Glu Val Lys Thr Lys Leu Phe Ser Leu Glu His Phe Leu Asn Glu
355 360 365

Leu Ile Leu Phe Gln Lys Gly Gln Thr Asn Thr Pro Pro Pro Phe Glu
370 375 380

Ile Phe Phe Cys Phe Gly Glu Glu Trp Pro Asp Arg Lys Pro Arg Glu
385 390 395 400

Lys Lys Leu Ile Thr Val Gln Val Val Pro Val Ala Ala Arg Leu Leu
405 410 415

Leu Glu Met Phe Ser Gly Glu Leu Ser Trp Ser Ala Asp Ser Ile Arg
420 425 430

Leu Gln Ile Ser Asn Pro Asp Leu Lys Asp Arg Met Val Glu Gln Phe
435 440 445

Lys Glu Leu His His Ile Trp Gln Ser Gln Gln Arg Leu Gln Pro Val
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Lys Lys Cys

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 <213> Human immunodeficiency virus type 1

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 1 5 10

<210> 6
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 20 25 30

Pro Arg Ala Leu Thr Ile Ser Asn Pro His Gly Cys Arg Leu Phe Tyr
 35 40 45

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

Ser Leu Glu Gln Val Arg Phe Pro Ser Pro Glu Asp Ile Pro Ser Asp
 65 70 75 80

Lys Gln Arg Phe Tyr Thr Asn Gln Leu Leu Asp Val Leu Asp Arg Gly
 85 90 95

Leu Ile Leu Gln Leu Gln Gly Gln Asp Leu Tyr Ala Ile Arg Leu Cys

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100

105

110

Gln Cys Lys Val Phe Trp Ser Gly Pro Cys Ala Ser Ala His Asp Ser
115 120 125

Cys Pro Asn Pro Ile Gln Arg Glu Val Lys Thr Lys Leu Phe Ser Leu
130 135 140

Glu His Phe Leu Asn Glu Leu Ile Leu Phe Gln Lys Gly Gln Thr Asn
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Thr Pro Pro Pro Phe Glu Ile Phe Phe Cys Phe Gly Glu Glu Trp Pro
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20 25 30

Arg Phe Arg Tyr Lys Cys Glu Gly Arg Ser Ala Gly Ser Ile Pro Gly
35 40 45

Glu Arg Ser Thr Asp Thr Thr Lys Thr His Pro Thr Ile Lys Ile Asn
50 55 60

Gly Tyr Thr Gly Pro Gly Thr Val Arg Ile Ser Leu Val Thr Lys Asp
65 70 75 80

Pro Pro His Arg Pro His Pro His Glu Leu Val Gly Lys Asp Cys Arg
85 90 95

Asp Gly Phe Tyr Glu Ala Glu Leu Cys Pro Asp Arg Cys Ile His Ser
100 105 110

Phe Gln Asn Leu Gly Ile Gln Cys Val Lys Lys Arg Asp Leu Glu Gln
115 120 125

Ala Ile Ser Gln Arg Ile Gln Thr Asn Asn Asn Pro Phe Gln Glu Glu
130 135 140

Gln Arg Gly Asp Tyr Asp Leu Asn Ala Val Arg Leu Cys Phe Gln Val
145 150 155 160

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Thr Val Arg Asp Pro Ser Gly Arg Pro Leu Arg Leu Pro Pro Val Leu
165 170 175

Ser His Pro Ile Phe Asp Asn Arg Ala Pro Asn Thr Ala Glu Leu Lys
180 185 190

Ile Cys Arg Val Asn Arg Asn Ser Gly Ser Cys Leu Gly Gly Asp Glu
195 200 205

Ile Phe Leu Leu Cys Asp Lys Val Gln Lys Glu Asp Ile Glu Val Tyr
210 215 220

Phe Thr Gly Pro Gly Trp Glu Ala Arg Gly Ser Phe Ser Gln Ala Asp
225 230 235 240

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

Pro Ser Leu Gln Ala Pro Val Arg Val Ser Met Gln Leu Arg Arg Pro
260 265 270

Ser Asp Arg Glu Leu Ser Glu Pro Met Glu Phe Gln Tyr Leu Pro Asp
275 280 285

Thr Asp Asp Arg His Arg Ile Glu Glu Lys Arg Lys Arg Thr Tyr Glu
290 295 300

Thr Phe Lys Ser Ile Met Lys Lys Ser Pro Phe Ser Gly Pro Thr Asp
305 310 315 320

Pro Arg Pro Pro Pro Arg Arg Ile Ala Val Pro Ser Arg Ser Ser Ala
325 330 335

Ser Val Pro Lys Pro Ala Pro Gln Pro Tyr Pro Phe Thr Ser Ser Leu
340 345 350

Ser Thr Ile Asn Tyr Asp Glu Phe Pro Thr Met Val Phe Pro Ser Gly
355 360 365

Gln Ile Ser Gln Ala Ser Ala Leu Ala Pro Ala Pro Pro Gln Val Leu
370 375 380

Pro Gln Ala Pro Ala Pro Ala Pro Ala Met Val Ser Ala Leu
385 390 395 400

Ala Gln Ala Pro Ala Pro Val Pro Val Leu Ala Pro Gly Pro Pro Gln
405 410 415

Ala Val Ala Pro Pro Ala Pro Lys Pro Thr Gln Ala Gly Glu Gly Thr
420 425 430

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Leu Ser Glu Ala Leu Leu Gln Leu Gln Phe Asp Asp Glu Asp Leu Gly
435 440 445

Ala Leu Leu Gly Asn Ser Thr Asp Pro Ala Val Phe Thr Asp Leu Ala
450 455 460

Ser Val Asp Asn Ser Glu Phe Gln Gln Leu Leu Asn Gln Gly Ile Pro
465 470 475 480

Val Ala Pro His Thr Thr Glu Pro Met Leu Met Glu Tyr Pro Glu Ala
485 490 495

Ile Thr Arg Leu Val Thr Gly Ala Gln Arg Pro Pro Asp Pro Ala Pro
500 505 510

Ala Pro Leu Gly Ala Pro Gly Leu Pro Asn Gly Leu Leu Ser Gly Asp
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Gln Ile Ser Ser
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35 40 45

Gly Ser Phe Ser Gln Ala Asp Val His Arg Gln Val Ala Ile Val Phe
50 55 60

Arg Thr Pro Pro Tyr Ala Asp Pro Ser Leu Gln Ala Pro Val Arg Val
65 70 75 80

Ser Met Gln Leu Arg Arg Pro Ser Asp Arg Glu Leu Ser Glu Pro Met
85 90 95

Glu Phe Gln Tyr Leu Pro Asp Thr Asp Asp Arg
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Ser Thr Ala Pro Ser Ala Ala Ala Ser Ala Ser Ala Ser Ala Ala Ala
35     40     45

Ser Ser Pro Ala Gly Gly Gly Ala Glu Ala Leu Glu Leu Leu Glu His
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Cys Gly Val Cys Arg Glu Arg Leu Arg Pro Glu Arg Glu Pro Arg Leu
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Leu Pro Cys Leu His Ser Ala Cys Ser Ala Cys Leu Gly Pro Ala Ala
85     90     95

Pro Ala Ala Ala Asn Ser Ser Gly Asp Gly Gly Ala Ala Gly Asp Gly
100    105    110

Thr Gly Pro Ala Lys Ser Arg Asp Gly Glu Arg Thr Val Tyr Cys Asn
115    120    125

Val His Lys His Glu Pro Leu Val Leu Phe Cys Glu Ser Cys Asp Thr
130    135    140

Leu Thr Cys Arg Asp Cys Gln Leu Asn Ala His Lys Asp His Gln Tyr
145    150    155    160

Gln Phe Leu Glu Asp Ala Val Arg Asn Gln Arg Lys Leu Leu Ala Ser
165    170    175

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

Lys Glu Val Arg Ser Ser Ile Arg Gln Val Ser Asp Val Gln Lys Arg
195    200    205

Val Gln Val Asp Val Lys Met Ala Ile Leu Gln Ile Met Lys Glu Leu
210    215    220

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

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Gly Gln Gln Glu Arg Leu Glu Arg Gln His Trp Thr Met Thr Lys Ile
245 250 255

Gln Lys His Gln Glu His Ile Leu Arg Phe Ala Ser Trp Ala Leu Glu
260 265 270

Ser Asp Asn Asn Thr Ala Leu Leu Leu Ser Lys Lys Leu Ile Tyr Phe
275 280 285

Gln Leu His Arg Ala Leu Lys Met Ile Val Asp Pro Val Glu Pro His
290 295 300

Gly Glu Met Lys Phe Gln Trp Asp Leu Asn Ala Trp Thr Lys Ser Ala
305 310 315 320

Glu Ala Phe Gly Lys Ile Val Ala Glu Arg Pro Gly Thr Asn Ser Thr
325 330 335

Gly Pro Ala Pro Met Ala Pro Pro Arg Ala Pro Gly Pro Leu Ser Lys
340 345 350

Gln Gly Ser Gly Ser Ser Gln Pro Met Glu Val Gln Glu Gly Tyr Gly
355 360 365

Phe Gly Ser Gly Asp Asp Pro Tyr Ser Ser Ala Glu Pro His Val Ser
370 375 380

Gly Val Lys Arg Ser Arg Ser Gly Glu Gly Glu Val Ser Gly Leu Met
385 390 395 400

Arg Lys Val Pro Arg Val Ser Leu Glu Arg Leu Asp Leu Asp Leu Thr
405 410 415

Ala Asp Ser Gln Pro Pro Val Phe Lys Val Phe Pro Gly Ser Thr Thr
420 425 430

Glu Asp Tyr Asn Leu Ile Val Ile Glu Arg Gly Ala Ala Ala Ala Ala
435 440 445

Thr Gly Gln Pro Gly Thr Ala Pro Ala Gly Thr Pro Gly Ala Pro Pro
450 455 460

Leu Ala Gly Met Ala Ile Val Lys Glu Glu Glu Thr Glu Ala Ala Ile
465 470 475 480

Gly Ala Pro Pro Thr Ala Thr Glu Gly Pro Glu Thr Lys Pro Val Leu
485 490 495

Met Ala Leu Ala Glu Gly Pro Gly Ala Glu Gly Pro Arg Leu Ala Ser
500 505 510

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Pro Ser Gly Ser Thr Ser Ser Gly Leu Glu Val Val Ala Pro Glu Gly
515 520 525

Thr Ser Ala Pro Gly Gly Gly Pro Gly Thr Leu Asp Asp Ser Ala Thr
530 535 540

Ile Cys Arg Val Cys Gln Lys Pro Gly Asp Leu Val Met Cys Asn Gln
545 550 555 560

Cys Glu Phe Cys Phe His Leu Asp Cys His Leu Pro Ala Leu Gln Asp
565 570 575

Val Pro Gly Glu Glu Trp Ser Cys Ser Leu Cys His Val Leu Pro Asp
580 585 590

Leu Lys Glu Glu Asp Gly Ser Leu Ser Leu Asp Gly Ala Asp Ser Thr
595 600 605

Gly Val Val Ala Lys Leu Ser Pro Ala Asn Gln Arg Lys Cys Glu Arg
610 615 620

Val Leu Leu Ala Leu Phe Cys His Glu Pro Cys Arg Pro Leu His Gln
625 630 635 640

Leu Ala Thr Asp Ser Thr Phe Ser Leu Asp Gln Pro Gly Gly Thr Leu
645 650 655

Asp Leu Thr Leu Ile Arg Ala Arg Leu Gln Glu Lys Leu Ser Pro Pro
660 665 670

Tyr Ser Ser Pro Gln Glu Phe Ala Gln Asp Val Gly Arg Met Phe Lys
675 680 685

Gln Phe Asn Lys Leu Thr Glu Asp Lys Ala Asp Val Gln Ser Ile Ile
690 695 700

Gly Leu Gln Arg Phe Phe Glu Thr Arg Met Asn Glu Ala Phe Gly Asp
705 710 715 720

Thr Lys Phe Ser Ala Val Leu Val Glu Pro Pro Pro Met Ser Leu Pro
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Gly Ala Gly Leu Ser Ser Gln Glu Leu Ser Gly Gly Pro Gly Asp Gly
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 <210> 34
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 <210> 35
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 <210> 36
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 <210> 38
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 <210> 39
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<212> DNA
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<210> 40
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<220>
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<210> 41
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<210> 42
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<210> 43
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<210> 44
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<210> 46
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<210> 47
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<223> PRDI-III(IFN-beta) reverse oligonucleotide probe

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 <210> 51
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22