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      /organism="Chimpanzee adenovirus AdY25"

<400> 3
Met Met Arg Arg Ala Tyr Pro Glu Gly Pro Pro Pro Ser Tyr Glu Ser
1               5                  10                  15
Val Met Gln Gln Ala Met Ala Ala Ala Ala Ala Met Gln Pro Pro Leu
            20                  25                  30
Glu Ala Pro Tyr Val Pro Pro Arg Tyr Leu Ala Pro Thr Glu Gly Arg
        35                  40                  45
Asn Ser Ile Arg Tyr Ser Glu Leu Ala Pro Leu Tyr Asp Thr Thr Arg
    50                  55                  60
Leu Tyr Leu Val Asp Asn Lys Ser Ala Asp Ile Ala Ser Leu Asn Tyr
65                  70                  75                  80
Gln Asn Asp His Ser Asn Phe Leu Thr Thr Val Val Gln Asn Asn Asp
                85                  90                  95
Phe Thr Pro Thr Glu Ala Ser Thr Gln Thr Ile Asn Phe Asp Glu Arg
            100                 105                 110
Ser Arg Trp Gly Gly Gln Leu Lys Thr Ile Met His Thr Asn Met Pro
        115                 120                 125
Asn Val Asn Glu Phe Met Tyr Ser Asn Lys Phe Lys Ala Arg Val Met
    130                 135                 140
Val Ser Arg Lys Thr Pro Asn Gly Val Thr Val Thr Asp Gly Ser Gln
145                 150                 155                 160
Asp Ile Leu Glu Tyr Glu Trp Val Glu Phe Glu Leu Pro Glu Gly Asn
                165                 170                 175
Phe Ser Val Thr Met Thr Ile Asp Leu Met Asn Asn Ala Ile Ile Asp
            180                 185                 190
Asn Tyr Leu Ala Val Gly Arg Gln Asn Gly Val Leu Glu Ser Asp Ile
        195                 200                 205
Gly Val Lys Phe Asp Thr Arg Asn Phe Arg Leu Gly Trp Asp Pro Val
    210                 215                 220
Thr Glu Leu Val Met Pro Gly Val Tyr Thr Asn Glu Ala Phe His Pro
225                 230                 235                 240
Asp Ile Val Leu Leu Pro Gly Cys Gly Val Asp Phe Thr Glu Ser Arg
                245                 250                 255
Leu Ser Asn Leu Leu Gly Ile Arg Lys Arg Gln Pro Phe Gln Glu Gly
```

```
            260                 265                 270
Phe Gln Ile Met Tyr Glu Asp Leu Glu Gly Gly Asn Ile Pro Ala Leu
        275                 280                 285
Leu Asp Val Asp Ala Tyr Glu Lys Ser Lys Glu Glu Ser Ala Ala Ala
    290                 295                 300
Ala Thr Ala Ala Val Ala Thr Ala Ser Thr Glu Val Arg Gly Asp Asn
305                 310                 315                 320
Phe Ala Ser Pro Ala Ala Val Ala Ala Ala Glu Ala Ala Glu Thr Glu
                325                 330                 335
Ser Lys Ile Val Ile Gln Pro Val Glu Lys Asp Ser Lys Asp Arg Ser
            340                 345                 350
Tyr Asn Val Leu Pro Asp Lys Ile Asn Thr Ala Tyr Arg Ser Trp Tyr
        355                 360                 365
Leu Ala Tyr Asn Tyr Gly Asp Pro Glu Lys Gly Val Arg Ser Trp Thr
    370                 375                 380
Leu Leu Thr Thr Ser Asp Val Thr Cys Gly Val Glu Gln Val Tyr Trp
385                 390                 395                 400
Ser Leu Pro Asp Met Met Gln Asp Pro Val Thr Phe Arg Ser Thr Arg
                405                 410                 415
Gln Val Ser Asn Tyr Pro Val Val Gly Ala Glu Leu Leu Pro Val Tyr
            420                 425                 430
Ser Lys Ser Phe Phe Asn Glu Gln Ala Val Tyr Ser Gln Gln Leu Arg
        435                 440                 445
Ala Phe Thr Ser Leu Thr His Val Phe Asn Arg Phe Pro Glu Asn Gln
    450                 455                 460
Ile Leu Val Arg Pro Pro Ala Pro Thr Ile Thr Thr Val Ser Glu Asn
465                 470                 475                 480
Val Pro Ala Leu Thr Asp His Gly Thr Leu Pro Leu Arg Ser Ser Ile
                485                 490                 495
Arg Gly Val Gln Arg Val Thr Val Thr Asp Ala Arg Arg Arg Thr Cys
            500                 505                 510
Pro Tyr Val Tyr Lys Ala Leu Gly Ile Val Ala Pro Arg Val Leu Ser
        515                 520                 525
Ser Arg Thr Phe
    530
```

<210> 4
<211> 443
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..443
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 4

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Met Ser Lys Lys Arg Ala Arg Val Asp Asp Gly Phe Asp Pro Val Tyr
1               5                   10                  15
Pro Tyr Asp Ala Asp Asn Ala Pro Thr Val Pro Phe Ile Asn Pro Pro
            20                  25                  30
Phe Val Ser Ser Asp Gly Phe Gln Glu Lys Pro Leu Gly Val Leu Ser
        35                  40                  45
Leu Arg Leu Ala Asp Pro Val Thr Thr Lys Asn Gly Ala Val Thr Leu
    50                  55                  60
Lys Leu Gly Glu Gly Val Asp Leu Asp Asp Ser Gly Lys Leu Ile Ser
65                  70                  75                  80
Lys Asn Ala Thr Lys Ala Thr Ala Pro Leu Ser Ile Ser Asn Gly Thr
                85                  90                  95
Ile Ser Leu Asn Met Ala Ala Pro Phe Tyr Asn Asn Asn Gly Thr Leu
            100                 105                 110
Ser Leu Asn Val Ser Thr Pro Leu Ala Val Phe Pro Thr Phe Asn Thr
        115                 120                 125
Leu Gly Ile Ser Leu Gly Asn Gly Leu Gln Thr Ser Asn Lys Leu Leu
    130                 135                 140
Thr Val Gln Leu Thr His Pro Leu Thr Phe Ser Ser Asn Ser Ile Thr
145                 150                 155                 160
```

```
Val Lys Thr Asp Lys Gly Leu Tyr Ile Asn Ser Ser Gly Asn Arg Gly
                165                 170                 175
Leu Glu Ala Asn Ile Ser Leu Lys Arg Gly Leu Ile Phe Asp Gly Asn
            180                 185                 190
Ala Ile Ala Thr Tyr Leu Gly Ser Gly Leu Asp Tyr Gly Ser Tyr Asp
        195                 200                 205
Ser Asp Gly Lys Thr Arg Pro Ile Ile Thr Lys Ile Gly Ala Gly Leu
    210                 215                 220
Asn Phe Asp Ala Asn Asn Ala Met Ala Val Lys Leu Gly Thr Gly Leu
225                 230                 235                 240
Ser Phe Asp Ser Ala Gly Ala Leu Thr Ala Gly Asn Lys Glu Asp Asp
                245                 250                 255
Lys Leu Thr Leu Trp Thr Thr Pro Asp Pro Ser Pro Asn Cys Gln Leu
            260                 265                 270
Leu Ser Asp Arg Asp Ala Lys Phe Thr Leu Cys Leu Thr Lys Cys Gly
        275                 280                 285
Ser Gln Ile Leu Gly Thr Val Ala Val Ala Ala Val Thr Val Gly Ser
    290                 295                 300
Ala Leu Asn Pro Ile Asn Asp Thr Val Lys Ser Ala Ile Val Phe Leu
305                 310                 315                 320
Arg Phe Asp Ser Asp Gly Val Leu Met Ser Asn Ser Ser Met Val Gly
                325                 330                 335
Asp Tyr Trp Asn Phe Arg Glu Gly Gln Thr Thr Gln Ser Val Ala Tyr
            340                 345                 350
Thr Asn Ala Val Gly Phe Met Pro Asn Leu Gly Ala Tyr Pro Lys Thr
        355                 360                 365
Gln Ser Lys Thr Pro Lys Asn Ser Ile Val Ser Gln Val Tyr Leu Asn
    370                 375                 380
Gly Glu Thr Thr Met Pro Met Thr Leu Thr Ile Thr Phe Asn Gly Thr
385                 390                 395                 400
Asp Glu Lys Asp Thr Thr Pro Val Ser Thr Tyr Ser Met Thr Phe Thr
                405                 410                 415
Trp Gln Trp Thr Gly Asp Tyr Lys Asp Lys Asn Ile Thr Phe Ala Thr
            420                 425                 430
Asn Ser Phe Thr Phe Ser Tyr Met Ala Gln Glu
        435                 440
```

<210> 5
<211> 257
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..257
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 5

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Met Arg His Leu Arg Asp Leu Pro Asp Glu Lys Ile Ile Ile Ala Ser
1                 5                  10                  15
Gly Asn Glu Ile Leu Glu Leu Val Val Asn Ala Met Met Gly Asp Asp
            20                  25                  30
Pro Pro Glu Pro Pro Thr Pro Phe Glu Ala Pro Ser Leu His Asp Leu
        35                  40                  45
Tyr Asp Leu Glu Val Asp Val Pro Glu Asp Asp Pro Asn Glu Glu Ala
    50                  55                  60
Val Asn Asp Leu Phe Ser Asp Ala Ala Leu Leu Ala Ala Glu Glu Ala
65                  70                  75                  80
Ser Ser Pro Ser Ser Asp Ser Asp Ser Ser Leu His Thr Pro Arg Pro
                85                  90                  95
Gly Arg Gly Glu Lys Lys Ile Pro Glu Leu Lys Gly Glu Glu Met Asp
            100                 105                 110
Leu Arg Cys Tyr Glu Glu Cys Leu Pro Pro Ser Asp Asp Glu Asp Glu
        115                 120                 125
Gln Ala Ile Gln Asn Ala Ala Ser Gln Gly Met Gln Ala Ala Ser Glu
    130                 135                 140
Ser Phe Ala Leu Asp Cys Pro Pro Leu Pro Gly His Gly Cys Lys Ser
```

```
145                 150                 155                 160
Cys Glu Phe His Arg Leu Asn Thr Gly Asp Lys Ala Val Leu Cys Ala
                165                 170                 175
Leu Cys Tyr Met Arg Ala Tyr Asn His Cys Val Tyr Ser Pro Val Ser
            180                 185                 190
Asp Ala Asp Asp Glu Thr Pro Thr Thr Glu Ser Thr Ser Ser Pro Pro
        195                 200                 205
Glu Ile Gly Thr Ser Pro Pro Glu Asn Ile Val Arg Pro Val Pro Val
    210                 215                 220
Arg Ala Thr Gly Arg Arg Ala Ala Val Glu Cys Leu Asp Asp Leu Leu
225                 230                 235                 240
Gln Ala Gly Asp Glu Pro Leu Asp Leu Cys Thr Arg Lys Arg Pro Arg
                245                 250                 255
His
```

<210> 6
<211> 187
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..187
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 6

```
Met Glu Ile Trp Thr Ile Leu Glu Asp Leu His Lys Thr Arg Gln Leu
1               5                  10                  15
Leu Glu Asn Ala Ser Asn Gly Val Ser His Leu Trp Arg Phe Cys Phe
            20                  25                  30
Gly Gly Asp Leu Ala Lys Leu Val Tyr Arg Ala Lys Gln Asp Tyr Ser
        35                  40                  45
Glu Gln Phe Glu Val Ile Leu Arg Glu Cys Pro Gly Leu Phe Asp Ala
    50                  55                  60
Leu Asn Leu Gly His Gln Thr His Phe Asn Gln Arg Ile Val Arg Ala
65                  70                  75                  80
Leu Asp Phe Thr Thr Pro Gly Arg Ser Thr Ala Ala Val Ala Phe Phe
                85                  90                  95
Ala Phe Leu Leu Asp Lys Trp Ser Gln Glu Thr His Phe Ser Arg Asp
            100                 105                 110
Tyr Gln Leu Asp Phe Leu Ala Val Ala Leu Trp Arg Thr Trp Lys Ser
        115                 120                 125
Gln Arg Leu Asn Ala Ile Ser Gly Tyr Leu Pro Val Gln Pro Leu Asp
    130                 135                 140
Thr Leu Lys Ile Leu Asn Leu Gln Glu Ser Pro Arg Ala Arg Gln Arg
145                 150                 155                 160
Arg Arg Gln Gln Gln Arg Gln Gln Glu Glu Asp Gln Glu Glu Asn Pro
                165                 170                 175
Arg Ala Gly Leu Asp Pro Pro Ala Glu Glu Glu
            180                 185
```

<210> 7
<211> 499
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..499
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 7

```
Met Glu Ser Arg Asn Pro Phe Gln Gln Gly Leu Pro Ala Gly Phe Leu
1               5                  10                  15
Ser Ser Ser Phe Val Glu Asn Met Glu Ile Pro Ala Pro Glu Cys Asn
```

```
            20                  25                  30
Leu Arg Leu Leu Ala Gly Thr Ala Thr Arg His Ser Glu Asp Pro Glu
        35                  40                  45
Ser Pro Gly Glu Ser Gln Gly Thr Pro Thr Ser Pro Ala Ala Ala Ala
    50                  55                  60
Ala Ala Gly Gly Gly Ser Arg Arg Glu Pro Glu Ser Arg Pro Gly Pro
65                  70                  75                  80
Ser Gly Gly Gly Gly Val Ala Asp Leu Phe Pro Glu Leu Arg Arg Val
                85                  90                  95
Leu Thr Arg Ser Ser Ser Gly Arg Glu Arg Gly Ile Lys Arg Glu Arg
            100                 105                 110
His Asp Glu Thr Asn His Arg Thr Glu Leu Thr Val Gly Leu Met Ser
        115                 120                 125
Arg Lys Arg Pro Glu Thr Val Trp Trp His Glu Val Gln Ser Thr Gly
    130                 135                 140
Thr Asp Glu Val Ser Val Met His Glu Arg Phe Ser Leu Glu Gln Val
145                 150                 155                 160
Lys Thr Cys Trp Leu Glu Pro Glu Asp Asp Trp Glu Val Ala Ile Arg
                165                 170                 175
Asn Tyr Ala Lys Leu Ala Leu Arg Pro Asp Lys Lys Tyr Lys Ile Thr
            180                 185                 190
Lys Leu Ile Asn Ile Arg Asn Ala Cys Tyr Ile Ser Gly Asn Gly Ala
        195                 200                 205
Glu Val Glu Ile Cys Leu Gln Glu Arg Val Ala Phe Arg Cys Cys Met
    210                 215                 220
Met Asn Met Tyr Pro Gly Val Val Gly Met Asp Gly Val Thr Phe Met
225                 230                 235                 240
Asn Met Arg Phe Arg Gly Asp Gly Tyr Asn Gly Thr Val Phe Met Ala
                245                 250                 255
Asn Thr Lys Leu Thr Val His Gly Cys Ser Phe Phe Gly Phe Asn Asn
            260                 265                 270
Thr Cys Ile Glu Ala Trp Gly Gln Val Gly Val Arg Gly Cys Ser Phe
        275                 280                 285
Ser Ala Asn Trp Met Gly Val Val Gly Arg Thr Lys Ser Met Leu Ser
    290                 295                 300
Val Lys Lys Cys Leu Phe Glu Arg Cys His Leu Gly Val Met Ser Glu
305                 310                 315                 320
Gly Glu Ala Arg Ile Arg His Cys Ala Ser Thr Glu Thr Gly Cys Phe
                325                 330                 335
Val Leu Cys Lys Gly Asn Ala Lys Ile Lys His Asn Met Ile Cys Gly
            340                 345                 350
Ala Ser Asp Glu Arg Gly Tyr Gln Met Leu Thr Cys Ala Gly Gly Asn
        355                 360                 365
Ser His Met Leu Ala Thr Val His Val Ala Ser His Ala Arg Lys Pro
    370                 375                 380
Trp Pro Glu Phe Glu His Asn Val Met Thr Arg Cys Asn Met His Leu
385                 390                 395                 400
Gly Ser Arg Arg Gly Met Phe Met Pro Tyr Gln Cys Asn Leu Asn Tyr
                405                 410                 415
Val Lys Val Leu Leu Glu Pro Asp Ala Met Ser Arg Val Ser Leu Thr
            420                 425                 430
Gly Val Phe Asp Met Asn Val Glu Val Trp Lys Ile Leu Arg Tyr Asp
        435                 440                 445
Glu Ser Lys Thr Arg Cys Arg Ala Cys Glu Cys Gly Gly Lys His Ala
    450                 455                 460
Arg Phe Gln Pro Val Cys Val Glu Val Thr Glu Asp Leu Arg Pro Asp
465                 470                 475                 480
His Leu Val Leu Ser Cys Thr Gly Thr Glu Phe Gly Ser Ser Gly Glu
                485                 490                 495
Glu Ser Asp
```

<210> 8
<211> 142
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>

<221> SOURCE
<222> 1..142
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 8
Met Ser Gly Ser Gly Ser Phe Glu Gly Gly Val Phe Ser Pro Tyr Leu
1 5 10 15
Thr Gly Arg Leu Pro Ser Trp Ala Gly Val Arg Gln Asn Val Met Gly
20 25 30
Ser Thr Val Asp Gly Arg Pro Val Gln Pro Ala Asn Ser Ser Thr Leu
35 40 45
Thr Tyr Ala Thr Leu Ser Ser Ser Ser Val Asp Ala Ala Ala Ala Ala
50 55 60
Ala Ala Ala Ser Ala Ala Ser Ala Val Arg Gly Met Ala Met Gly Ala
65 70 75 80
Gly Tyr Tyr Gly Thr Leu Val Ala Asn Ser Ser Ser Thr Asn Asn Pro
85 90 95
Ala Ser Leu Asn Glu Glu Lys Leu Leu Leu Leu Met Ala Gln Leu Glu
100 105 110
Ala Leu Thr Gln Arg Leu Gly Glu Leu Thr Gln Gln Val Ala Gln Leu
115 120 125
Gln Glu Gln Thr Arg Ala Ala Val Ala Thr Val Lys Ser Lys
130 135 140

<210> 9
<211> 449
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..449
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 9
Met Glu Thr Lys Gly Arg Arg Arg Ser Gly Ala Val Phe Asp Gln Pro
1 5 10 15
Asp Glu Pro Glu Ala His Pro Arg Lys Arg Pro Ala Arg Arg Ala Pro
20 25 30
Leu His Arg Asp Gly Asp His Pro Asp Ala Asp Ala Ala Ala Leu Glu
35 40 45
Gly Pro Asp Pro Gly Cys Ala Gly Arg Pro Ser Ser Gly Ala Leu Leu
50 55 60
Pro Gln Ser Ser Gln Pro Ala Lys Arg Gly Gly Leu Leu Asp Arg Asp
65 70 75 80
Ala Val Glu His Ile Thr Glu Leu Trp Asp Arg Leu Glu Leu Leu Gln
85 90 95
Gln Thr Leu Ser Lys Met Pro Met Ala Asp Gly Leu Lys Pro Leu Lys
100 105 110
Asn Phe Ala Ser Leu Gln Glu Leu Leu Ser Leu Gly Gly Glu Arg Leu
115 120 125
Leu Ala Glu Leu Val Arg Glu Asn Met His Val Arg Glu Met Met Asn
130 135 140
Glu Val Ala Pro Leu Leu Arg Glu Asp Gly Ser Cys Leu Ser Leu Asn
145 150 155 160
Tyr His Leu Gln Pro Val Ile Gly Val Ile Tyr Gly Pro Thr Gly Cys
165 170 175
Gly Lys Ser Gln Leu Leu Arg Asn Leu Leu Ser Ala Gln Leu Ile Ser
180 185 190
Pro Ala Pro Glu Thr Val Phe Phe Ile Ala Pro Gln Val Asp Met Ile
195 200 205
Pro Pro Ser Glu Leu Lys Ala Trp Glu Met Gln Ile Cys Glu Gly Asn
210 215 220
Tyr Ala Pro Gly Ile Glu Gly Thr Phe Val Pro Gln Ser Gly Thr Leu
225 230 235 240
Arg Pro Lys Phe Ile Lys Met Ala Tyr Asp Asp Leu Thr Gln Asp His

```
                245                 250                 255
Asn Tyr Asp Val Ser Asp Pro Arg Asn Val Phe Ala Gln Ala Ala Ala
            260                 265                 270
His Gly Pro Ile Ala Ile Ile Met Asp Glu Cys Met Glu Asn Leu Gly
        275                 280                 285
Gly His Lys Gly Val Ala Lys Phe Phe His Ala Phe Pro Ser Lys Leu
    290                 295                 300
His Asp Lys Phe Pro Lys Cys Thr Gly Tyr Thr Val Leu Val Val Leu
305                 310                 315                 320
His Asn Met Asn Pro Arg Arg Asp Leu Gly Gly Asn Ile Ala Asn Leu
                325                 330                 335
Lys Ile Gln Ala Lys Met His Leu Ile Ser Pro Arg Met His Pro Ser
            340                 345                 350
Gln Leu Asn Arg Phe Val Asn Thr Tyr Thr Lys Gly Leu Pro Val Ala
        355                 360                 365
Ile Ser Leu Leu Leu Lys Asp Ile Val Gln His His Ala Leu Arg Pro
    370                 375                 380
Cys Tyr Asp Trp Val Ile Tyr Asn Thr Thr Pro Glu His Glu Ala Leu
385                 390                 395                 400
Gln Trp Ser Tyr Leu His Pro Arg Asp Gly Leu Met Pro Met Tyr Leu
                405                 410                 415
Asn Ile Gln Ala His Leu Tyr Arg Val Leu Glu Lys Ile His Arg Val
            420                 425                 430
Leu Asn Asp Arg Asp Arg Trp Ser Arg Ala Tyr Arg Ala Arg Lys Ile
        435                 440                 445
Lys
```

<210> 10
<211> 1196
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..1196
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 10

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Met Ala Leu Val Gln Thr His Gly Ser Arg Gly Leu His Pro Glu Ala
1               5                  10                  15
Ser Asp Pro Gly Arg Gln Pro Ser Arg Arg Arg Ser Arg Gln Ser Ser
            20                  25                  30
Pro Gly Ala Val Pro Glu Pro Thr Arg Ala Arg Arg Arg Arg Ala Pro
        35                  40                  45
Ala Ala Pro Ala Ser Gly Pro Arg Ala Ala Ser Ala Ala Arg Arg Ala
    50                  55                  60
Ser Ser Pro Pro Leu Leu Thr Met Glu Glu Ala Pro Pro Pro Ser Pro
65                  70                  75                  80
Gln Pro Pro Lys Lys Lys Arg Gly Thr Val Val Thr Pro Gln Gly His
                85                  90                  95
Gly Thr Leu Gln Ala Ile Asp Val Ala Thr Asn Gly Ala Val Glu Ile
            100                 105                 110
Lys Tyr His Leu Asp Leu Pro Arg Ala Leu Glu Lys Leu Leu Gln Val
        115                 120                 125
Asn Arg Ala Pro Pro Leu Pro Thr Asp Leu Thr Pro Gln Arg Leu Arg
    130                 135                 140
Thr Leu Asp Ser Ser Gly Leu Arg Ala Leu Val Leu Ala Leu Arg Pro
145                 150                 155                 160
Ala Arg Ala Glu Val Trp Thr Cys Leu Pro Arg Gly Leu Val Ser Met
                165                 170                 175
Thr Thr Ile Glu Ala Glu Glu Gly Gln Ala Asp His His Asp Val Val
            180                 185                 190
Gln His Glu Met Gln Ala Pro Arg Leu His Phe Pro Leu Lys Phe Leu
        195                 200                 205
Val Lys Gly Thr Gln Val Gln Leu Val Gln His Val His Pro Val Gln
    210                 215                 220
```

```
Arg Cys Glu His Cys Gly Arg Leu Tyr Lys His Lys His Glu Cys Ser
225                 230                 235                 240
Ala Arg Arg Arg His Phe Tyr Phe His His Ile Asn Ser His Ser Ser
                245                 250                 255
Asn Trp Trp Gln Glu Ile Gln Phe Phe Pro Ile Gly Ser His Pro Arg
            260                 265                 270
Thr Glu Arg Leu Phe Leu Thr Tyr Asp Val Glu Thr Tyr Thr Trp Met
        275                 280                 285
Gly Ser Phe Gly Lys Gln Leu Val Pro Phe Met Leu Val Met Lys Leu
    290                 295                 300
Ser Gly Asp Asp Arg Leu Val Glu Leu Ala Leu Asp Leu Ala Leu Gln
305                 310                 315                 320
Leu Lys Trp Asp Arg Trp His Gly Asp Pro Arg Thr Phe Tyr Cys Val
                325                 330                 335
Thr Pro Glu Lys Met Ala Val Gly Gln Gln Phe Arg Gln Tyr Arg Asp
            340                 345                 350
Arg Leu Gln Thr Ala Leu Ala Val Asp Leu Trp Thr Ser Phe Leu Arg
        355                 360                 365
Ala Asn Pro His Leu Ala Asp Trp Ala Leu Glu Gln His Gly Leu Ser
    370                 375                 380
Asp Pro Asp Glu Leu Thr Tyr Glu Glu Leu Lys Lys Leu Pro His Val
385                 390                 395                 400
Lys Gly Arg Pro Arg Phe Val Glu Leu Tyr Ile Val Gly His Asn Ile
                405                 410                 415
Asn Gly Phe Asp Glu Ile Val Leu Ala Ala Gln Val Ile Asn Asn Arg
            420                 425                 430
Ala Glu Val Pro Gln Pro Phe Arg Ile Thr Arg Asn Phe Met Pro Arg
        435                 440                 445
Ala Gly Lys Ile Leu Phe Asn Asp Val Thr Phe Ala Leu Pro Asn Pro
    450                 455                 460
Ala Tyr Lys Lys Arg Thr Asp Phe Gln Leu Trp Glu Gln Gly Gly Cys
465                 470                 475                 480
Asp Asp Ile Asp Phe Lys His Gln Phe Leu Lys Val Met Val Arg Asp
                485                 490                 495
Thr Phe Ala Leu Thr His Thr Ser Leu Arg Lys Ala Ala Gln Ala Tyr
            500                 505                 510
Ala Leu Pro Val Glu Lys Gly Cys Cys Ala Tyr Lys Ala Val Asn Gln
        515                 520                 525
Phe Tyr Met Leu Gly Ser Tyr Arg Ala Asp Gln Asp Gly Phe Pro Leu
    530                 535                 540
Glu Glu Tyr Trp Lys Asp Arg Glu Glu Phe Leu Leu Asn Arg Glu Leu
545                 550                 555                 560
Trp Lys Gln Lys Gly Gln Leu Lys Tyr Asp Ile Ile Gln Glu Thr Leu
                565                 570                 575
Asp Tyr Cys Ala Leu Asp Val Leu Val Thr Ala Glu Leu Val Ala Lys
            580                 585                 590
Leu Gln Asp Ser Tyr Ala His Phe Ile Arg Asp Ser Val Gly Leu Pro
        595                 600                 605
His Ala His Phe Asn Ile Phe Gln Arg Pro Thr Ile Ser Ser Asn Ser
    610                 615                 620
His Ala Ile Phe Arg Gln Ile Val Tyr Arg Ala Glu Lys Pro Ser Arg
625                 630                 635                 640
Thr Asn Leu Gly Pro Gly Leu Leu Ala Pro Ser His Glu Leu Tyr Asp
                645                 650                 655
Tyr Val Arg Ala Ser Ile Arg Gly Gly Arg Cys Tyr Pro Thr Tyr Ile
            660                 665                 670
Gly Ile Leu Glu Glu Pro Leu Tyr Val Tyr Asp Ile Cys Gly Met Tyr
        675                 680                 685
Ala Ser Ala Leu Thr His Pro Met Pro Trp Gly Thr Pro Leu Ser Pro
    690                 695                 700
Tyr Glu Arg Ala Leu Ala Val Arg Glu Trp Gln Ala Ser Leu Asp Asp
705                 710                 715                 720
Leu Ala Thr Ser Ile Ser Tyr Phe Asp Pro Asp Leu Leu Pro Gly Ile
                725                 730                 735
Phe Thr Ile Asp Ala Asp Pro Pro Asp Glu Val Met Leu Asp Pro Leu
            740                 745                 750
Pro Pro Phe Cys Ser Arg Lys Gly Gly Arg Leu Cys Trp Thr Asn Glu
        755                 760                 765
```

```
Pro Leu Arg Gly Glu Val Ala Thr Ser Val Asp Leu Ile Thr Leu His
    770                 775                 780
Asn Arg Gly Trp Gln Val Arg Ile Val Pro Asp Glu Met Thr Thr Val
785                 790                 795                 800
Phe Pro Glu Trp Lys Cys Val Ala Arg Glu Tyr Val Gln Leu Asn Ile
                805                 810                 815
Ala Ala Lys Glu Arg Ala Asp Lys Glu Lys Asn Gln Thr Met Arg Ser
            820                 825                 830
Ile Ala Lys Leu Leu Ser Asn Ala Leu Tyr Gly Ser Phe Ala Thr Lys
        835                 840                 845
Leu Asp Asn Lys Lys Ile Val Phe Ser Asp Gln Met Asp Glu Gly Leu
    850                 855                 860
Leu Lys Gly Ile Ser Ala Gly Thr Val Asn Ile Lys Ser Ser Ser Phe
865                 870                 875                 880
Leu Glu Thr Asp Asn Leu Ser Ala Glu Val Met Pro Ala Phe Glu Arg
                885                 890                 895
Glu Tyr Leu Pro Gln Gln Leu Ala Leu Leu Asp Ser Asp Pro Glu Asp
            900                 905                 910
Ser Glu Asp Glu Gln Gly Pro Ala Pro Phe Tyr Thr Pro Pro Ala Gly
        915                 920                 925
Thr Pro Gly His Val Ala Tyr Thr Tyr Lys Pro Ile Thr Phe Leu Asp
    930                 935                 940
Val Asp Glu Gly Asp Met Cys Leu His Thr Leu Glu Lys Val Asp Pro
945                 950                 955                 960
Leu Val Asp Asn Asp Arg Tyr Pro Ser His Val Ala Ser Phe Val Leu
                965                 970                 975
Ala Trp Thr Arg Ala Phe Val Ser Glu Trp Ala Gly Phe Leu Tyr Glu
            980                 985                 990
Glu Asp Arg Gly Thr Pro Leu Glu Asp Arg Pro Ile Lys Ser Val Tyr
        995                 1000                1005
Gly Asp Thr Asp Ser Leu Phe Val Thr Gln Arg Gly His Glu Leu Met
    1010                1015                1020
Glu Thr Lys Gly Lys Lys Arg Ile Lys Lys Asn Gly Gly Lys Leu Val
1025                1030                1035                1040
Phe Asp Pro Asp Gln Pro Asp Leu Thr Trp Leu Val Glu Cys Glu Thr
                1045                1050                1055
Val Cys Ala His Cys Gly Ala Asp Ala Tyr Ala Pro Asp Ser Val Phe
            1060                1065                1070
Leu Ala Pro Lys Leu Tyr Ala Leu Lys Ser Leu Leu Cys Pro Ala Cys
        1075                1080                1085
Gly Gln Thr Ser Lys Gly Lys Leu Arg Ala Lys Gly His Ala Ala Glu
    1090                1095                1100
Ala Leu Asn Tyr Glu Leu Met Val Asn Cys Tyr Leu Ala Asp Ala Gln
1105                1110                1115                1120
Gly Ala Asp Arg Glu Arg Phe Ser Thr Ser Arg Met Ser Leu Lys Arg
                1125                1130                1135
Thr Leu Ala Ser Ala Gln Pro Gly Ala His Pro Phe Thr Val Thr Glu
            1140                1145                1150
Thr Thr Leu Thr Arg Thr Leu Arg Pro Trp Lys Asp Arg Thr Leu Ala
        1155                1160                1165
Ala Leu Asp Ala His Arg Leu Val Pro Tyr Ser Arg Ser Arg Pro Asn
    1170                1175                1180
Pro Arg Asn Glu Glu Val Cys Trp Ile Glu Met Pro
1185                1190                1195

<210> 11
<211> 646
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..646
<223> /mol_type="protein"
      /organism="Chimpanzee adenovirus AdY25"

<400> 11
Met Ala Leu Ser Ile His Asp Cys Ala Arg Leu Thr Gly Gln Thr Val
```

```
1               5                  10                  15
Pro Thr Met Asn Tyr Phe Leu Pro Leu Arg Asn Ile Trp Asn Arg Val
            20                  25                  30
Arg Glu Phe Pro Arg Ala Ser Thr Thr Ala Ala Gly Ile Thr Trp Met
        35                  40                  45
Ser Arg Tyr Ile Tyr Gly Tyr His Arg Thr Met Leu Glu Asp Leu Ala
    50                  55                  60
Pro Gly Ala Pro Ala Thr Glu Arg Trp Pro Leu Tyr Arg Gln Pro Pro
65                  70                  75                  80
Pro His Phe Leu Ile Gly Tyr Gln Tyr Leu Val Arg Thr Cys Asn Asp
                85                  90                  95
Tyr Ile Phe Asp Thr Arg Ala Tyr Ser Arg Leu Lys Tyr His Glu Leu
            100                 105                 110
Val Arg Pro Gly His Gln Thr Val Asn Trp Ser Val Met Ala Asn Cys
        115                 120                 125
Ser Tyr Thr Ile Asn Thr Gly Ala Tyr His Arg Phe Val Asp Phe Asp
    130                 135                 140
Asp Phe Gln Thr Thr Leu Thr Gln Ile Gln Gln Ala Ile Leu Ala Glu
145                 150                 155                 160
Arg Val Val Ala Asp Leu Ala Leu Val Gln Pro Gln Arg Gly Phe Gly
                165                 170                 175
Leu Thr Arg Met His Gly Arg Ala Gly Glu Glu Glu Val Pro Val Glu
            180                 185                 190
Arg Leu Met Gln Asp Tyr Tyr Lys Asp Leu Ala Arg Cys Gln Asp His
        195                 200                 205
Ala Trp Gly Met Ala Asp Arg Leu Arg Ile Gln Gln Ala Gly Pro Lys
    210                 215                 220
Asp Leu Val Leu Leu Ala Thr Ile Arg Arg Leu Arg Thr Ala Tyr Phe
225                 230                 235                 240
Asn Phe Ile Thr Ser Ser Ile Ala Arg Pro Ala Pro Gln His Asp Pro
                245                 250                 255
Ala Glu Glu Thr Val Leu Ser Leu Pro Cys Asp Cys Asp Trp Leu Glu
            260                 265                 270
Ala Phe Val Gln Arg Phe Ser Asp Pro Val Asp Leu Glu Thr Leu Arg
        275                 280                 285
Ser Leu Arg Gly Val Pro Thr Gly Gln Leu Ile Arg Cys Ile Val Ser
    290                 295                 300
Ala Leu Ser Leu Pro Asn Gly Asp Pro Pro Gly His Leu Glu Met Arg
305                 310                 315                 320
Gly Gly Val Phe Thr Leu Arg Pro Arg Glu Asp Gly Arg Ala Val Thr
                325                 330                 335
Glu Thr Met Arg Arg Arg Arg Gly Glu Thr Ile Glu Arg Phe Ile Asp
            340                 345                 350
Arg Leu Pro Val Arg Arg Arg Arg Arg Arg Pro Pro Pro Pro Pro Pro
        355                 360                 365
Pro Pro Pro Glu Glu Glu Val Glu Glu Met Leu Val Glu Glu Glu Glu
    370                 375                 380
Glu Glu Glu Val Glu Glu Leu Pro Gly Ala Phe Glu Arg Glu Val Arg
385                 390                 395                 400
Ala Thr Ile Ala Glu Leu Ile Arg Leu Leu Glu Glu Glu Leu Thr Val
                405                 410                 415
Ser Ala Arg Asn Ser Gln Phe Phe Asn Phe Ala Val Asp Phe Tyr Glu
            420                 425                 430
Ala Met Glu Arg Leu Glu Ala Leu Gly Asp Val Ser Glu Met Pro Leu
        435                 440                 445
Arg Arg Trp Ile Met Tyr Phe Phe Val Thr Glu His Ile Ala Thr Thr
    450                 455                 460
Leu Asn Tyr Leu Tyr Gln Arg Leu Cys Asn Tyr Ala Val Phe Thr Arg
465                 470                 475                 480
His Val Glu Leu Asn Leu Ala Gln Val Val Met Arg Ala Arg Asp Pro
                485                 490                 495
Glu Gly Val Val Val Tyr Ser Arg Val Trp Asn Glu Ala Gly Met Asn
            500                 505                 510
Ala Phe Ser Gln Leu Met Gly Arg Ile Ser Asn Asp Leu Ala Ala Thr
        515                 520                 525
Val Glu Arg Ala Gly Arg Gly Asp Leu Gln Glu Glu Glu Ile Glu Gln
    530                 535                 540
Phe Met Thr Glu Ile Ala Tyr Gln Asp Asn Ser Gly Asp Val Gln Glu
```

545 550 555 560
Ile Leu Arg Gln Ala Ala Val Asn Asp Thr Glu Ile Asp Ser Val Glu
565 570 575
Leu Ser Phe Arg Phe Lys Leu Thr Gly Pro Val Ala Phe Thr Gln Arg
580 585 590
Arg Gln Ile Gln Asp Val Asn Arg Arg Val Val Ala His Ala Ser Leu
595 600 605
Leu Arg Ala Gln Tyr Gln Asn Leu Pro Ala Arg Gly Ala Asp Val Pro
610 615 620
Leu Pro Pro Leu Pro Pro Gly Pro Glu Pro Pro Leu Pro Pro Gly Ala
625 630 635 640
Arg Pro Arg Arg Arg Phe
645

<210> 12
<211> 396
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..396
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 12
Met His Pro Val Leu Arg Gln Met Arg Pro His His Pro Pro Pro Gln
1 5 10 15
Gln Gln Pro Pro Pro Pro Gln Pro Ala Leu Leu Pro Pro Pro Gln Gln
20 25 30
Gln Gln Gln Leu Pro Ala Thr Thr Ala Ala Ala Ala Val Ser Gly Ala
35 40 45
Gly Gln Thr Ser Gln Tyr Asp His Leu Ala Leu Glu Glu Gly Glu Gly
50 55 60
Leu Ala Arg Leu Gly Ala Ser Ser Pro Glu Arg His Pro Arg Val Gln
65 70 75 80
Met Lys Arg Asp Ala Arg Glu Ala Tyr Val Pro Lys Gln Asn Leu Phe
85 90 95
Arg Asp Arg Ser Gly Glu Glu Pro Glu Glu Met Arg Ala Ala Arg Phe
100 105 110
His Ala Gly Arg Glu Leu Arg Arg Gly Leu Asp Arg Lys Arg Val Leu
115 120 125
Arg Asp Glu Asp Phe Glu Ala Asp Glu Leu Thr Gly Ile Ser Pro Ala
130 135 140
Arg Ala His Val Ala Ala Ala Asn Leu Val Thr Ala Tyr Glu Gln Thr
145 150 155 160
Val Lys Glu Glu Ser Asn Phe Gln Lys Ser Phe Asn Asn His Val Arg
165 170 175
Thr Leu Ile Ala Arg Glu Glu Val Thr Leu Gly Leu Met His Leu Trp
180 185 190
Asp Leu Leu Glu Ala Ile Val Gln Asn Pro Thr Ser Lys Pro Leu Thr
195 200 205
Ala Gln Leu Phe Leu Val Val Gln His Ser Arg Asp Asn Glu Ala Phe
210 215 220
Arg Glu Ala Leu Leu Asn Ile Thr Glu Pro Glu Gly Arg Trp Leu Leu
225 230 235 240
Asp Leu Val Asn Ile Leu Gln Ser Ile Val Val Gln Glu Arg Gly Leu
245 250 255
Pro Leu Ser Glu Lys Leu Ala Ala Ile Asn Phe Ser Val Leu Ser Leu
260 265 270
Gly Lys Tyr Tyr Ala Arg Lys Ile Tyr Lys Thr Pro Tyr Val Pro Ile
275 280 285
Asp Lys Glu Val Lys Ile Asp Gly Phe Tyr Met Arg Met Thr Leu Lys
290 295 300
Val Leu Thr Leu Ser Asp Asp Leu Gly Val Tyr Arg Asn Asp Arg Met
305 310 315 320
His Arg Ala Val Ser Ala Ser Arg Arg Arg Glu Leu Ser Asp Gln Glu
325 330 335

Leu Met His Ser Leu Gln Arg Ala Leu Thr Gly Ala Gly Thr Glu Gly
340 345 350
Glu Ser Tyr Phe Asp Met Gly Ala Asp Leu His Trp Gln Pro Ser Arg
355 360 365
Arg Ala Leu Glu Ala Ala Gly Gly Pro Pro Tyr Ile Glu Glu Val Asp
370 375 380
Asp Glu Val Asp Glu Glu Gly Glu Tyr Leu Glu Asp
385 390 395

<210> 13
<211> 589
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..589
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 13
Met Gln Gln Gln Pro Pro Pro Asp Pro Ala Met Arg Ala Ala Leu Gln
1 5 10 15
Ser Gln Pro Ser Gly Ile Asn Ser Ser Asp Asp Trp Thr Gln Ala Met
20 25 30
Gln Arg Ile Met Ala Leu Thr Thr Arg Asn Pro Glu Ala Phe Arg Gln
35 40 45
Gln Pro Gln Ala Asn Arg Leu Ser Ala Ile Leu Glu Ala Val Val Pro
50 55 60
Ser Arg Ser Asn Pro Thr His Glu Lys Val Leu Ala Ile Val Asn Ala
65 70 75 80
Leu Val Glu Asn Lys Ala Ile Arg Gly Asp Glu Ala Gly Leu Val Tyr
85 90 95
Asn Ala Leu Leu Glu Arg Val Ala Arg Tyr Asn Ser Thr Asn Val Gln
100 105 110
Thr Asn Leu Asp Arg Met Val Thr Asp Val Arg Glu Ala Val Ala Gln
115 120 125
Arg Glu Arg Phe His Arg Glu Ser Asn Leu Gly Ser Met Val Ala Leu
130 135 140
Asn Ala Phe Leu Ser Thr Gln Pro Ala Asn Val Pro Arg Gly Gln Glu
145 150 155 160
Asp Tyr Thr Asn Phe Ile Ser Ala Leu Arg Leu Met Val Thr Glu Val
165 170 175
Pro Gln Ser Glu Val Tyr Gln Ser Gly Pro Asp Tyr Phe Phe Gln Thr
180 185 190
Ser Arg Gln Gly Leu Gln Thr Val Asn Leu Ser Gln Ala Phe Lys Asn
195 200 205
Leu Gln Gly Leu Trp Gly Val Gln Ala Pro Val Gly Asp Arg Ala Thr
210 215 220
Val Ser Ser Leu Leu Thr Pro Asn Ser Arg Leu Leu Leu Leu Leu Val
225 230 235 240
Ala Pro Phe Thr Asp Ser Gly Ser Ile Asn Arg Asn Ser Tyr Leu Gly
245 250 255
Tyr Leu Ile Asn Leu Tyr Arg Glu Ala Ile Gly Gln Ala His Val Asp
260 265 270
Glu Gln Thr Tyr Gln Glu Ile Thr His Val Ser Arg Ala Leu Gly Gln
275 280 285
Asp Asp Pro Gly Asn Leu Glu Ala Thr Leu Asn Phe Leu Leu Thr Asn
290 295 300
Arg Ser Gln Lys Ile Pro Pro Gln Tyr Thr Leu Ser Ala Glu Glu Glu
305 310 315 320
Arg Ile Leu Arg Tyr Val Gln Gln Ser Val Gly Leu Phe Leu Met Gln
325 330 335
Glu Gly Ala Thr Pro Ser Ala Ala Leu Asp Met Thr Ala Arg Asn Met
340 345 350
Glu Pro Ser Met Tyr Ala Ser Asn Arg Pro Phe Ile Asn Lys Leu Met
355 360 365
Asp Tyr Leu His Arg Ala Ala Ala Met Asn Ser Asp Tyr Phe Thr Asn

```
    370                 375                 380
Ala Ile Leu Asn Pro His Trp Leu Pro Pro Pro Gly Phe Tyr Thr Gly
385                 390                 395                 400
Glu Tyr Asp Met Pro Asp Pro Asn Asp Gly Phe Leu Trp Asp Asp Val
                405                 410                 415
Asp Ser Ser Val Phe Ser Pro Arg Pro Gly Ala Asn Glu Arg Pro Leu
            420                 425                 430
Trp Lys Lys Glu Gly Ser Asp Arg Arg Pro Ser Ser Ala Leu Ser Gly
        435                 440                 445
Arg Glu Gly Ala Ala Ala Ala Val Pro Glu Ala Ala Ser Pro Phe Pro
    450                 455                 460
Ser Leu Pro Phe Ser Leu Asn Ser Ile Arg Ser Ser Glu Leu Gly Arg
465                 470                 475                 480
Ile Thr Arg Pro Arg Leu Leu Gly Glu Glu Glu Tyr Leu Asn Asp Ser
                485                 490                 495
Leu Leu Arg Pro Glu Arg Glu Lys Asn Phe Pro Asn Asn Gly Ile Glu
            500                 505                 510
Ser Leu Val Asp Lys Met Ser Arg Trp Lys Thr Tyr Ala Gln Glu His
        515                 520                 525
Arg Asp Asp Pro Ser Gln Gly Ala Thr Ser Arg Gly Ser Ala Ala Arg
    530                 535                 540
Lys Arg Arg Trp His Asp Arg Gln Arg Gly Leu Met Trp Asp Asp Glu
545                 550                 555                 560
Asp Ser Ala Asp Asp Ser Ser Val Leu Asp Leu Gly Gly Ser Gly Asn
                565                 570                 575
Pro Phe Ala His Leu Arg Pro Arg Ile Gly Arg Met Met
            580                 585
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<210> 14
<211> 193
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..193
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 14

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Met Ser Ile Leu Ile Ser Pro Ser Asn Asn Thr Gly Trp Gly Leu Arg
1               5                  10                  15
Ala Pro Ser Lys Met Tyr Gly Gly Ala Arg Gln Arg Ser Thr Gln His
            20                  25                  30
Pro Val Arg Val Arg Gly His Phe Arg Ala Pro Trp Gly Ala Leu Lys
        35                  40                  45
Gly Arg Val Arg Ser Arg Thr Thr Val Asp Asp Val Ile Asp Gln Val
    50                  55                  60
Val Ala Asp Ala Arg Asn Tyr Thr Pro Ala Ala Ala Pro Val Ser Thr
65                  70                  75                  80
Val Asp Ala Val Ile Asp Ser Val Val Ala Asp Ala Arg Arg Tyr Ala
                85                  90                  95
Arg Ala Lys Ser Arg Arg Arg Arg Ile Ala Arg Arg His Arg Ser Thr
            100                 105                 110
Pro Ala Met Arg Ala Ala Arg Ala Leu Leu Arg Arg Ala Arg Arg Thr
        115                 120                 125
Gly Arg Arg Ala Met Leu Arg Ala Ala Arg Arg Ala Ala Ser Gly Ala
    130                 135                 140
Ser Ala Gly Arg Thr Arg Arg Arg Ala Ala Thr Ala Ala Ala Ala Ala
145                 150                 155                 160
Ile Ala Ser Met Ser Arg Pro Arg Arg Gly Asn Val Tyr Trp Val Arg
                165                 170                 175
Asp Ala Ala Thr Gly Val Arg Val Pro Val Arg Thr Arg Pro Pro Arg
            180                 185                 190
Thr
```

<210> 15

<211> 340
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..340
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 15
Met Ser Lys Arg Lys Phe Lys Glu Glu Met Leu Gln Val Ile Ala Pro
1 5 10 15
Glu Ile Tyr Gly Pro Ala Val Val Lys Glu Glu Arg Lys Pro Arg Lys
20 25 30
Ile Lys Arg Val Lys Lys Asp Lys Lys Glu Glu Asp Asp Asp Leu Val
35 40 45
Glu Phe Val Arg Glu Phe Ala Pro Arg Arg Arg Val Gln Trp Arg Gly
50 55 60
Arg Lys Val His Pro Val Leu Arg Pro Gly Thr Thr Val Val Phe Thr
65 70 75 80
Pro Gly Glu Arg Ser Gly Ser Ala Ser Lys Arg Ser Tyr Asp Glu Val
85 90 95
Tyr Gly Asp Glu Asp Ile Leu Glu Gln Ala Ala Glu Arg Leu Gly Glu
100 105 110
Phe Ala Tyr Gly Lys Arg Ser Arg Pro Ala Leu Lys Glu Glu Ala Val
115 120 125
Ser Ile Pro Leu Asp His Gly Asn Pro Thr Pro Ser Leu Lys Pro Val
130 135 140
Thr Leu Gln Gln Val Leu Pro Ser Ala Ala Pro Arg Arg Gly Phe Lys
145 150 155 160
Arg Glu Gly Glu Asp Leu Tyr Pro Thr Met Gln Leu Met Val Pro Lys
165 170 175
Arg Gln Lys Leu Glu Asp Val Leu Glu Thr Met Lys Val Asp Pro Asp
180 185 190
Val Gln Pro Glu Val Lys Val Arg Pro Ile Lys Gln Val Ala Pro Gly
195 200 205
Leu Gly Val Gln Thr Val Asp Ile Lys Ile Pro Thr Glu Pro Met Glu
210 215 220
Thr Gln Thr Glu Pro Met Ile Lys Pro Ser Thr Ser Thr Met Glu Val
225 230 235 240
Gln Thr Asp Pro Trp Met Pro Ser Ala Pro Ser Arg Arg Pro Arg Arg
245 250 255
Lys Tyr Gly Ala Ala Ser Leu Leu Met Pro Asn Tyr Ala Leu His Pro
260 265 270
Ser Ile Ile Pro Thr Pro Gly Tyr Arg Gly Thr Arg Phe Tyr Arg Gly
275 280 285
His Thr Thr Ser Arg Arg Arg Lys Thr Thr Thr Arg Arg Arg Arg Arg
290 295 300
Arg Thr Ala Ala Ala Ser Thr Pro Ala Ala Leu Val Arg Arg Val Tyr
305 310 315 320
Arg Arg Gly Arg Ala Pro Leu Thr Leu Pro Arg Ala Arg Tyr His Pro
325 330 335
Ser Ile Ala Ile
340

<210> 16
<211> 77
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..77
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 16

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Met Ala Leu Thr Cys Arg Leu Arg Val Pro Ile Thr Gly Tyr Arg Gly
1               5                  10                  15
Arg Lys Pro Arg Arg Arg Arg Leu Ala Gly Asn Gly Met Arg Arg His
            20                  25                  30
His His Arg Arg Arg Arg Ala Ile Ser Lys Arg Leu Gly Gly Gly Phe
        35                  40                  45
Leu Pro Ala Leu Ile Pro Ile Ile Ala Ala Ala Ile Gly Ala Ile Pro
    50                  55                  60
Gly Ile Ala Ser Val Ala Val Gln Ala Ser Gln Arg His
65                  70                  75
```

<210> 17
<211> 243
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..243
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 17

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Met Glu Asp Ile Asn Phe Ser Ser Leu Ala Pro Arg His Gly Thr Arg
1               5                  10                  15
Pro Phe Met Gly Thr Trp Ser Asp Ile Gly Thr Ser Gln Leu Asn Gly
            20                  25                  30
Gly Ala Phe Asn Trp Ser Ser Leu Trp Ser Gly Leu Lys Asn Phe Gly
        35                  40                  45
Ser Thr Leu Lys Thr Tyr Gly Ser Lys Ala Trp Asn Ser Thr Thr Gly
    50                  55                  60
Gln Ala Leu Arg Asp Lys Leu Lys Glu Gln Asn Phe Gln Gln Lys Val
65                  70                  75                  80
Val Asp Gly Leu Ala Ser Gly Ile Asn Gly Val Val Asp Leu Ala Asn
                85                  90                  95
Gln Ala Val Gln Arg Gln Ile Asn Ser Arg Leu Asp Pro Val Pro Pro
            100                 105                 110
Ala Gly Ser Val Glu Met Pro Gln Val Glu Glu Glu Leu Pro Pro Leu
        115                 120                 125
Asp Lys Arg Gly Glu Lys Arg Pro Arg Pro Asp Ala Glu Glu Thr Leu
    130                 135                 140
Leu Thr His Thr Asp Glu Pro Pro Pro Tyr Glu Glu Ala Val Lys Leu
145                 150                 155                 160
Gly Leu Pro Thr Thr Arg Pro Ile Ala Pro Leu Ala Thr Gly Val Leu
                165                 170                 175
Lys Pro Glu Ser Asn Lys Pro Ala Thr Leu Asp Leu Pro Pro Pro Ala
            180                 185                 190
Ser Arg Pro Ser Thr Val Ala Lys Pro Leu Pro Pro Val Ala Val Ala
        195                 200                 205
Arg Ala Arg Pro Gly Gly Ser Ala Arg Pro His Ala Asn Trp Gln Ser
    210                 215                 220
Thr Leu Asn Ser Ile Val Gly Leu Gly Val Gln Ser Val Lys Arg Arg
225                 230                 235                 240
Arg Cys Tyr
```

<210> 18
<211> 209
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..209
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 18

```
Met Ala Glu Pro Thr Gly Ser Gly Glu Gln Glu Leu Arg Ala Ile Ile
1               5                  10                  15
Arg Asp Leu Gly Cys Gly Pro Tyr Phe Leu Gly Thr Phe Asp Lys Arg
            20                  25                  30
Phe Pro Gly Phe Met Ala Pro His Lys Leu Ala Cys Ala Ile Val Asn
        35                  40                  45
Thr Ala Gly Arg Glu Thr Gly Gly Glu His Trp Leu Ala Phe Ala Trp
    50                  55                  60
Asn Pro Arg Ser Asn Thr Cys Tyr Leu Phe Asp Pro Phe Gly Phe Ser
65                  70                  75                  80
Asp Glu Arg Leu Lys Gln Ile Tyr Gln Phe Glu Tyr Glu Gly Leu Leu
                85                  90                  95
Arg Arg Ser Ala Leu Ala Thr Glu Asp Arg Cys Val Thr Leu Glu Lys
            100                 105                 110
Ser Thr Gln Thr Val Gln Gly Pro Arg Ser Ala Ala Cys Gly Leu Phe
        115                 120                 125
Cys Cys Met Phe Leu His Ala Phe Val His Trp Pro Asp Arg Pro Met
    130                 135                 140
Asp Lys Asn Pro Thr Met Asn Leu Leu Thr Gly Val Pro Asn Gly Met
145                 150                 155                 160
Leu Gln Ser Pro Gln Val Glu Pro Thr Leu Arg Arg Asn Gln Glu Ala
                165                 170                 175
Leu Tyr Arg Phe Leu Asn Ser His Ser Ala Tyr Phe Arg Ser His Arg
            180                 185                 190
Ala Arg Ile Glu Lys Ala Thr Ala Phe Asp Arg Met Asn Asn Gln Asp
        195                 200                 205
Met
```

<210> 19
<211> 512
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..512
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 19

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Met Ala Gly Arg Gly Gly Ser Gln Ser Glu Arg Arg Arg Glu Arg Thr
1               5                  10                  15
Pro Glu Arg Gly Arg Gly Ser Ala Ser His Pro Pro Ser Arg Gly Gly
            20                  25                  30
Glu Ser Pro Ser Pro Pro Pro Leu Pro Pro Lys Arg His Thr Tyr Arg
        35                  40                  45
Arg Val Ala Ser Asp Gln Glu Glu Glu Glu Ile Val Val Val Ser Glu
    50                  55                  60
Asn Ser Arg Ser Pro Ser Pro Gln Ala Ser Pro Pro Pro Leu Pro Pro
65                  70                  75                  80
Lys Lys Lys Pro Arg Lys Thr Lys His Val Val Met Gln Asp Val Ser
                85                  90                  95
Gln Asp Ser Glu Asp Glu Arg Gln Ala Glu Glu Glu Leu Ala Ala Val
            100                 105                 110
Gly Phe Ser Tyr Pro Pro Val Arg Ile Thr Glu Lys Asp Gly Lys Arg
        115                 120                 125
Ser Phe Glu Thr Leu Asp Glu Ser Asp Pro Leu Ala Ala Ala Ala Ser
    130                 135                 140
Ala Lys Met Met Val Lys Asn Pro Met Ser Leu Pro Ile Val Ser Ala
145                 150                 155                 160
Trp Glu Lys Gly Met Glu Ile Met Thr Met Leu Met Asp Arg Tyr Arg
                165                 170                 175
Val Glu Thr Asp Leu Lys Ala Asn Phe Gln Leu Met Pro Glu Gln Gly
            180                 185                 190
Glu Val Tyr Arg Arg Ile Cys His Leu Tyr Ile Asn Glu Glu His Arg
        195                 200                 205
Gly Ile Pro Leu Thr Phe Thr Ser Asn Lys Thr Leu Thr Thr Met Met
```

```
    210                 215                 220
Gly Arg Phe Leu Gln Gly Phe Val His Ala His Ser Gln Ile Ala His
225                 230                 235                 240
Lys Asn Trp Glu Cys Thr Gly Cys Ala Leu Trp Leu His Gly Cys Thr
                245                 250                 255
Glu Ala Glu Gly Lys Leu Arg Cys Leu His Gly Thr Thr Met Ile Gln
            260                 265                 270
Lys Glu His Met Ile Glu Met Asp Val Ala Ser Glu Asn Gly Gln Arg
        275                 280                 285
Ala Leu Lys Glu Asn Pro Asp Arg Ala Lys Ile Thr Gln Asn Arg Trp
    290                 295                 300
Gly Arg Ser Val Val Gln Leu Ala Asn Asn Asp Ala Arg Cys Cys Val
305                 310                 315                 320
His Asp Ala Gly Cys Ala Thr Asn Gln Phe Ser Ser Lys Ser Cys Gly
                325                 330                 335
Val Phe Phe Thr Glu Gly Ala Lys Ala Gln Gln Ala Phe Arg Gln Leu
            340                 345                 350
Glu Ala Phe Met Lys Ala Met Tyr Pro Gly Met Asn Ala Asp Gln Ala
        355                 360                 365
Gln Met Met Leu Ile Pro Leu His Cys Asp Cys Asn His Lys Pro Gly
    370                 375                 380
Cys Val Pro Thr Met Gly Arg Gln Thr Cys Lys Met Thr Pro Phe Gly
385                 390                 395                 400
Met Ala Asn Ala Glu Asp Leu Asp Val Glu Ser Ile Thr Asp Ala Ala
                405                 410                 415
Val Leu Ala Ser Val Lys His Pro Ala Leu Met Val Phe Gln Cys Cys
            420                 425                 430
Asn Pro Val Tyr Arg Asn Ser Arg Ala Gln Asn Ala Gly Pro Asn Cys
        435                 440                 445
Asp Phe Lys Ile Ser Ala Pro Asp Leu Leu Gly Ala Leu Gln Leu Thr
    450                 455                 460
Arg Lys Leu Trp Thr Asp Ser Phe Pro Asp Thr Pro Leu Pro Lys Leu
465                 470                 475                 480
Leu Ile Pro Glu Phe Lys Trp Leu Ala Lys Tyr Gln Phe Arg Asn Val
                485                 490                 495
Ser Leu Pro Ala Gly His Ala Glu Thr Arg Gln Asn Pro Phe Asp Phe
            500                 505                 510

<210> 20
<211> 802
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..802
<223> /mol_type="protein"
      /organism="Chimpanzee adenovirus AdY25"

<400> 20
Met Glu Thr Gln Pro Ser Pro Thr Ser Pro Ser Ala Pro Thr Ala Gly
1               5                  10                  15
Asp Glu Lys Gln Gln Gln Gln Asn Glu Ser Leu Thr Ala Pro Pro Pro
            20                  25                  30
Ser Pro Ala Ser Asp Ala Ala Ala Val Pro Asp Met Gln Glu Met Glu
        35                  40                  45
Glu Ser Ile Glu Ile Asp Leu Gly Tyr Val Thr Pro Ala Glu His Glu
    50                  55                  60
Glu Glu Leu Ala Val Arg Phe Gln Ser Ser Ser Gln Glu Asp Lys Glu
65                  70                  75                  80
Gln Pro Glu Gln Glu Ala Glu Asn Glu Gln Ser Gln Ala Gly Leu Glu
                85                  90                  95
His Gly Asp Tyr Leu His Leu Ser Gly Glu Glu Asp Ala Leu Ile Lys
            100                 105                 110
His Leu Ala Arg Gln Ala Thr Ile Val Lys Asp Ala Leu Leu Asp Arg
        115                 120                 125
Thr Glu Val Pro Leu Ser Val Glu Glu Leu Ser Arg Ala Tyr Glu Leu
    130                 135                 140
```

```
Asn Leu Phe Ser Pro Arg Val Pro Pro Lys Arg Gln Pro Asn Gly Thr
145                 150                 155                 160
Cys Glu Pro Asn Pro Arg Leu Asn Phe Tyr Pro Val Phe Ala Val Pro
                165                 170                 175
Glu Ala Leu Ala Thr Tyr His Ile Phe Phe Lys Asn Gln Lys Ile Pro
            180                 185                 190
Val Ser Cys Arg Ala Asn Arg Thr Arg Ala Asp Ala Leu Phe Asn Leu
        195                 200                 205
Gly Pro Gly Ala Arg Leu Pro Asp Ile Ala Ser Leu Glu Glu Val Pro
    210                 215                 220
Lys Ile Phe Glu Gly Leu Gly Ser Asp Glu Thr Arg Ala Ala Asn Ala
225                 230                 235                 240
Leu Gln Gly Glu Gly Gly Gly Glu His Glu His His Ser Ala Leu Val
                245                 250                 255
Glu Leu Glu Gly Asp Asn Ala Arg Leu Ala Val Leu Lys Arg Thr Val
            260                 265                 270
Glu Leu Thr His Phe Ala Tyr Pro Ala Leu Asn Leu Pro Pro Lys Val
        275                 280                 285
Met Ser Ala Val Met Asp Gln Val Leu Ile Lys Arg Ala Ser Pro Ile
    290                 295                 300
Ser Glu Asp Glu Gly Met Gln Asp Ser Glu Glu Gly Lys Pro Val Val
305                 310                 315                 320
Ser Asp Glu Gln Leu Ala Arg Trp Leu Gly Pro Asn Ala Thr Pro Gln
                325                 330                 335
Ser Leu Glu Glu Arg Arg Lys Leu Met Met Ala Val Val Leu Val Thr
            340                 345                 350
Val Glu Leu Glu Cys Leu Arg Arg Phe Phe Ala Asp Ala Glu Thr Leu
        355                 360                 365
Arg Lys Val Glu Glu Asn Leu His Tyr Leu Phe Arg His Gly Phe Val
    370                 375                 380
Arg Gln Ala Cys Lys Ile Ser Asn Val Glu Leu Thr Asn Leu Val Ser
385                 390                 395                 400
Tyr Met Gly Ile Leu His Glu Asn Arg Leu Gly Gln Asn Val Leu His
                405                 410                 415
Thr Thr Leu Arg Gly Glu Ala Arg Arg Asp Tyr Ile Arg Asp Cys Val
            420                 425                 430
Tyr Leu Tyr Leu Cys His Thr Trp Gln Thr Gly Met Gly Val Trp Gln
        435                 440                 445
Gln Cys Leu Glu Glu Gln Asn Leu Lys Glu Leu Cys Lys Leu Leu Gln
    450                 455                 460
Lys Asn Leu Lys Gly Leu Trp Thr Gly Phe Asp Glu Arg Thr Thr Ala
465                 470                 475                 480
Ser Asp Leu Ala Asp Leu Ile Phe Pro Glu Arg Leu Arg Leu Thr Leu
                485                 490                 495
Arg Asn Gly Leu Pro Asp Phe Met Ser Gln Ser Met Leu Gln Asn Phe
            500                 505                 510
Arg Ser Phe Ile Leu Glu Arg Ser Gly Ile Leu Pro Ala Thr Cys Ser
        515                 520                 525
Ala Leu Pro Ser Asp Phe Val Pro Leu Thr Phe Arg Glu Cys Pro Pro
    530                 535                 540
Pro Leu Trp Ser His Cys Tyr Leu Leu Arg Leu Ala Asn Tyr Leu Ala
545                 550                 555                 560
Tyr His Ser Asp Val Ile Glu Asp Val Ser Gly Glu Gly Leu Leu Glu
                565                 570                 575
Cys His Cys Arg Cys Asn Leu Cys Thr Pro His Arg Ser Leu Ala Cys
            580                 585                 590
Asn Pro Gln Leu Leu Ser Glu Thr Gln Ile Ile Gly Thr Phe Glu Leu
        595                 600                 605
Gln Gly Pro Ser Glu Gly Glu Gly Ala Lys Gly Gly Leu Lys Leu Thr
    610                 615                 620
Pro Gly Leu Trp Thr Ser Ala Tyr Leu Arg Lys Phe Val Pro Glu Asp
625                 630                 635                 640
Tyr His Pro Phe Glu Ile Arg Phe Tyr Glu Asp Gln Ser Gln Pro Pro
                645                 650                 655
Lys Ala Glu Leu Ser Ala Cys Val Ile Thr Gln Gly Ala Ile Leu Ala
            660                 665                 670
Gln Leu Gln Ala Ile Gln Lys Ser Arg Gln Glu Phe Leu Leu Lys Lys
        675                 680                 685
```

```
Gly Arg Gly Val Tyr Leu Asp Pro Gln Thr Gly Glu Glu Leu Asn Pro
    690                 695                 700
Gly Phe Pro Gln Asp Ala Pro Arg Lys Gln Glu Ala Glu Ser Gly Ala
705                 710                 715                 720
Ala Ala Arg Gly Gly Phe Gly Gly Arg Leu Gly Glu Gln Gln Ser Gly
                725                 730                 735
Arg Gly Asp Gly Gly Arg Leu Gly Gln His Ser Gly Arg Gly Gly Gln
            740                 745                 750
Pro Ala Arg Gln Ser Gly Gly Arg Arg Gly Gly Gly Arg Gly Gly Gly
        755                 760                 765
Gly Arg Ser Ser Arg Arg Gln Thr Val Val Leu Gly Gly Gly Glu Ser
    770                 775                 780
Lys Gln His Gly Tyr His Leu Arg Ser Gly Ser Gly Ser Arg Ser Ala
785                 790                 795                 800
Pro Gln
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<210> 21
<211> 184
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..184
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 21

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Met Pro Arg Gly Asn Lys Lys Leu Lys Val Glu Leu Pro Pro Val Glu
1               5                   10                  15
Asp Leu Glu Glu Asp Trp Glu Asn Ser Ser Gln Ala Glu Glu Met Glu
            20                  25                  30
Glu Asp Trp Asp Ser Thr Gln Ala Glu Glu Asp Ser Leu Gln Asp Ser
        35                  40                  45
Leu Glu Glu Asp Glu Glu Glu Ala Glu Glu Glu Val Glu Glu Ala Ala
    50                  55                  60
Ala Ala Arg Pro Ser Ser Ser Ala Gly Glu Lys Ala Ser Ser Thr Asp
65                  70                  75                  80
Thr Ile Ser Ala Pro Gly Arg Gly Pro Ala Arg Pro His Ser Arg Trp
                85                  90                  95
Asp Glu Thr Gly Arg Phe Pro Asn Pro Thr Thr Gln Thr Gly Lys Lys
            100                 105                 110
Glu Arg Gln Gly Tyr Lys Ser Trp Arg Gly His Lys Asn Ala Ile Val
        115                 120                 125
Ser Cys Leu Gln Ala Cys Gly Gly Asn Ile Ser Phe Thr Arg Arg Tyr
    130                 135                 140
Leu Leu Phe His Arg Gly Val Asn Phe Pro Arg Asn Ile Leu His Tyr
145                 150                 155                 160
Tyr Arg His Leu His Ser Pro Tyr Tyr Phe Gln Glu Glu Ala Ala Ala
                165                 170                 175
Ala Glu Lys Asp Gln Lys Thr Ser
            180
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<210> 22
<211> 219
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..219
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 22

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Met Pro Arg Gly Asn Lys Lys Leu Lys Val Glu Leu Pro Pro Val Glu
1               5                   10                  15
```

```
Asp Leu Glu Glu Asp Trp Glu Asn Ser Ser Gln Ala Glu Glu Met Glu
            20                  25                  30
Glu Asp Trp Asp Ser Thr Gln Ala Glu Glu Asp Ser Leu Gln Asp Ser
        35                  40                  45
Leu Glu Glu Asp Glu Glu Glu Ala Glu Glu Glu Val Glu Glu Ala Ala
    50                  55                  60
Ala Ala Arg Pro Ser Ser Ser Ala Gly Glu Lys Ala Ser Ser Thr Asp
65                  70                  75                  80
Thr Ile Ser Ala Pro Gly Arg Gly Pro Ala Arg Pro His Ser Arg Trp
                85                  90                  95
Asp Glu Thr Gly Arg Phe Pro Asn Pro Thr Thr Gln Thr Ala Pro Thr
            100                 105                 110
Thr Ser Lys Lys Arg Gln Gln Gln Gln Lys Lys Thr Arg Lys Pro Ala
        115                 120                 125
Arg Lys Ser Thr Ala Ala Ala Ala Ala Gly Gly Leu Arg Ile Ala Ala
    130                 135                 140
Asn Glu Pro Ala Gln Thr Arg Glu Leu Arg Asn Arg Ile Phe Pro Thr
145                 150                 155                 160
Leu Tyr Ala Ile Phe Gln Gln Ser Arg Gly Gln Glu Gln Glu Leu Lys
                165                 170                 175
Val Lys Asn Arg Ser Leu Arg Ser Leu Thr Arg Ser Cys Leu Tyr His
            180                 185                 190
Lys Ser Glu Asp Gln Leu Gln Arg Thr Leu Glu Asp Ala Glu Ala Leu
        195                 200                 205
Phe Asn Lys Tyr Cys Ala Leu Thr Leu Lys Glu
    210                 215

<210> 23
<211> 227
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..227
<223> /mol_type="protein"
      /organism="Chimpanzee adenovirus AdY25"

<400> 23
Met Ser Lys Glu Ile Pro Thr Pro Tyr Met Trp Ser Tyr Gln Pro Gln
1               5                   10                  15
Met Gly Leu Ala Ala Gly Ala Ala Gln Asp Tyr Ser Thr Arg Met Asn
            20                  25                  30
Trp Leu Ser Ala Gly Pro Ala Met Ile Ser Arg Val Asn Asp Ile Arg
        35                  40                  45
Ala His Arg Asn Gln Ile Leu Leu Glu Gln Ser Ala Leu Thr Ala Thr
    50                  55                  60
Pro Arg Asn His Leu Asn Pro Arg Asn Trp Pro Ala Ala Leu Val Tyr
65                  70                  75                  80
Gln Glu Ile Pro Gln Pro Thr Thr Val Leu Leu Pro Arg Asp Ala Gln
                85                  90                  95
Ala Glu Val Gln Leu Thr Asn Ser Gly Val Gln Leu Ala Gly Gly Ala
            100                 105                 110
Thr Leu Cys Arg His Arg Pro Ala Gln Gly Ile Lys Arg Leu Val Ile
        115                 120                 125
Arg Gly Arg Gly Thr Gln Leu Asn Asp Glu Val Val Ser Ser Ser Leu
    130                 135                 140
Gly Leu Arg Pro Asp Gly Val Phe Gln Leu Ala Gly Ser Gly Arg Ser
145                 150                 155                 160
Ser Phe Thr Pro Arg Gln Ala Val Leu Thr Leu Glu Ser Ser Ser Ser
                165                 170                 175
Gln Pro Arg Ser Gly Gly Ile Gly Thr Leu Gln Phe Val Glu Glu Phe
            180                 185                 190
Thr Pro Ser Val Tyr Phe Asn Pro Phe Ser Gly Ser Pro Gly His Tyr
        195                 200                 205
Pro Asp Glu Phe Ile Pro Asn Phe Asp Ala Ile Ser Glu Ser Val Asp
    210                 215                 220
Gly Tyr Asp
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225

<210> 24
<211> 106
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..106
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 24
Met Ser His Gly Gly Ala Ala Asp Leu Ala Arg Leu Arg His Leu Asp
1 5 10 15
His Cys Arg Arg Phe Arg Cys Phe Ala Arg Asp Leu Ala Glu Phe Thr
20 25 30
Tyr Phe Glu Leu Pro Glu Glu His Pro Gln Gly Pro Ala His Gly Val
35 40 45
Arg Ile Val Val Glu Gly Gly Leu Asp Ser His Leu Leu Arg Ile Phe
50 55 60
Ser Gln Arg Pro Ile Leu Val Glu Arg Gln Gln Gly Asn Thr Leu Leu
65 70 75 80
Thr Leu Tyr Cys Ile Cys Asp His Pro Gly Leu His Glu Ser Leu Cys
85 90 95
Cys Leu Leu Cys Thr Glu Tyr Asn Lys Ser
100 105

<210> 25
<211> 212
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..212
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 25
Met Lys Val Phe Val Val Cys Cys Val Leu Ser Ile Ile Lys Ala Glu
1 5 10 15
Ile Ser Asp Tyr Ser Gly Leu Asn Cys Gly Val Ser Ala Ser Ile Asn
20 25 30
Arg Ser Leu Thr Phe Thr Gly Asn Glu Thr Glu Leu Gln Val Gln Cys
35 40 45
Lys Pro His Lys Lys Tyr Leu Thr Trp Leu Tyr Gln Gly Ser Pro Ile
50 55 60
Ala Val Val Asn His Cys Asp Asp Asp Gly Val Leu Leu Asn Gly Pro
65 70 75 80
Ala Asn Leu Thr Phe Ser Thr Arg Arg Ser Lys Leu Leu Leu Phe Arg
85 90 95
Pro Phe Leu Pro Gly Thr Tyr Gln Cys Ile Ser Gly Pro Cys His His
100 105 110
Thr Phe His Leu Ile Pro Asn Thr Thr Ser Ser Pro Ala Pro Leu Pro
115 120 125
Thr Asn Asn Gln Thr Asn His His Gln Arg Tyr Arg Arg Asp Leu Val
130 135 140
Ser Glu Ser Asn Thr Thr His Thr Gly Gly Glu Leu Arg Gly Arg Lys
145 150 155 160
Pro Ser Gly Ile Tyr Tyr Gly Pro Trp Glu Val Val Gly Leu Ile Ala
165 170 175
Leu Gly Leu Val Ala Gly Gly Leu Leu Ala Leu Cys Tyr Leu Tyr Leu
180 185 190
Pro Cys Phe Ser Tyr Leu Val Val Leu Cys Cys Trp Phe Lys Lys Trp
195 200 205
Gly Arg Ser Pro

210

<210> 26
<211> 176
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..176
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 26
Met Gly Lys Ile Thr Leu Val Cys Gly Val Leu Val Thr Val Val Leu
1 5 10 15
Ser Ile Leu Gly Gly Gly Ser Ala Ala Val Val Thr Glu Lys Lys Ala
20 25 30
Asp Pro Cys Leu Thr Phe Asn Pro Asp Lys Cys Arg Leu Ser Phe Gln
35 40 45
Pro Asp Gly Asn Arg Cys Ala Val Leu Ile Lys Cys Gly Trp Glu Cys
50 55 60
Glu Ser Val Leu Val Gln Tyr Lys Asn Lys Thr Trp Asn Asn Thr Leu
65 70 75 80
Ala Ser Thr Trp Gln Pro Gly Asp Pro Glu Trp Tyr Thr Val Ser Val
85 90 95
Pro Gly Ala Asp Gly Ser Leu Arg Thr Val Asn Asn Thr Phe Ile Phe
100 105 110
Glu His Met Cys Glu Thr Ala Met Phe Met Ser Lys Gln Tyr Gly Met
115 120 125
Trp Pro Pro Arg Lys Glu Asn Ile Val Val Phe Ser Ile Ala Tyr Ser
130 135 140
Ala Cys Thr Val Leu Ile Thr Ala Ile Val Cys Leu Ser Ile His Met
145 150 155 160
Leu Ile Ala Ile Arg Pro Arg Asn Asn Ala Glu Lys Glu Lys Gln Pro
165 170 175

<210> 27
<211> 209
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..209
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 27
Met Lys Ile Leu Ser Leu Phe Cys Phe Ser Ile Ile Ile Thr Ser Ala
1 5 10 15
Ile Cys Asn Ser Val Asp Lys Asp Val Thr Val Thr Thr Gly Ser Asn
20 25 30
Tyr Thr Leu Lys Gly Pro Pro Ser Gly Met Leu Ser Trp Tyr Cys Tyr
35 40 45
Phe Gly Thr Asp Val Ser Gln Thr Glu Leu Cys Asn Phe Gln Lys Gly
50 55 60
Lys Thr Gln Asn Pro Lys Ile His Asn Tyr Gln Cys Asn Gly Thr Asp
65 70 75 80
Leu Val Leu Phe Asn Ile Thr Lys Thr Tyr Ala Gly Ser Tyr Tyr Cys
85 90 95
Pro Gly Asp Asn Val Asp Asn Met Ile Phe Tyr Glu Leu Gln Val Val
100 105 110
Asp Pro Thr Thr Pro Ala Pro Pro Thr Thr Thr Thr Lys Ala His Ser
115 120 125
Thr Asp Thr Gln Glu Thr Thr Pro Glu Ala Glu Val Ala Glu Leu Ala
130 135 140
Lys Gln Ile His Glu Asp Ser Phe Val Ala Asn Thr Pro Thr His Pro

```
145                 150                 155                 160
Gly Pro Gln Cys Pro Gly Pro Leu Val Ser Gly Ile Val Gly Val Leu
                165                 170                 175
Cys Gly Leu Ala Val Ile Ile Ile Cys Met Phe Ile Phe Ala Cys Cys
            180                 185                 190
Tyr Arg Arg Leu His Arg Gln Lys Ser Asp Pro Leu Leu Asn Leu Tyr
        195                 200                 205
Val
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<210> 28
<211> 302
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..302
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 28

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Met Lys Ala Leu Ser Thr Leu Val Phe Leu Thr Leu Ile Gly Ile Val
1               5                  10                  15
Phe Asn Ser Lys Ile Thr Arg Val Ser Phe Leu Lys His Val Asn Val
            20                  25                  30
Thr Glu Gly Asn Asn Ile Thr Leu Val Gly Val Glu Gly Ala Gln Asn
        35                  40                  45
Thr Thr Trp Thr Lys Tyr His Leu Gly Trp Lys Asp Ile Cys Thr Trp
    50                  55                  60
Asn Val Thr Tyr Phe Cys Ile Gly Val Asn Leu Thr Ile Val Asn Ala
65                  70                  75                  80
Asn Gln Ser Gln Asn Gly Leu Ile Lys Gly Gln Ser Val Ser Val Thr
                85                  90                  95
Ser Asp Gly Tyr Tyr Thr Gln His Asn Phe Asn Tyr Asn Ile Thr Val
            100                 105                 110
Ile Pro Leu Pro Thr Pro Ser Pro Pro Ser Thr Thr Gln Thr Thr Gln
        115                 120                 125
Thr Thr His Thr Thr Gln Ser Ser Thr Thr Thr Met Gln Thr Thr Gln
    130                 135                 140
Thr Thr Thr Tyr Thr Thr Ser Pro Gln Pro Thr Thr Thr Thr Ala Glu
145                 150                 155                 160
Ala Ser Ser Ser Pro Thr Ile Lys Val Ala Phe Leu Met Leu Ala Pro
                165                 170                 175
Ser Ser Ser Pro Thr Ala Ser Thr Asn Glu Gln Thr Thr Glu Phe Leu
            180                 185                 190
Ser Thr Ile Gln Ser Ser Thr Thr Ala Thr Ser Ser Ala Phe Ser Ser
        195                 200                 205
Thr Ala Asn Leu Thr Ser Leu Ser Ser Met Pro Ile Ser Asn Ala Thr
    210                 215                 220
Thr Ser Pro Ala Pro Leu Pro Thr Pro Leu Lys Gln Ser Glu Ser Ser
225                 230                 235                 240
Thr Gln Leu Gln Ile Thr Leu Leu Ile Val Ile Gly Val Val Ile Leu
                245                 250                 255
Ala Val Leu Leu Tyr Phe Ile Phe Cys Arg Arg Ile Pro Asn Ala Lys
            260                 265                 270
Pro Ala Tyr Lys Pro Ile Val Ile Gly Thr Pro Glu Pro Leu Gln Val
        275                 280                 285
Glu Gly Gly Leu Arg Asn Leu Leu Phe Ser Phe Thr Val Trp
    290                 295                 300
```

<210> 29
<211> 91
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE

<222> 1..91
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 29
Met Ile Pro Arg His Phe Ile Ile Thr Ser Leu Ile Cys Val Leu Gln
1 5 10 15
Val Cys Ala Thr Leu Ala Leu Val Ala Asn Ala Ser Pro Asp Cys Ile
20 25 30
Gly Ala Phe Ala Ser Tyr Val Leu Phe Ala Phe Ile Thr Cys Ile Cys
35 40 45
Cys Cys Ser Ile Val Cys Leu Leu Ile Thr Phe Phe Gln Phe Val Asp
50 55 60
Trp Val Phe Val Arg Ile Ala Tyr Leu Arg His His Pro Gln Tyr Arg
65 70 75 80
Asp Gln Arg Val Ala Gln Leu Leu Arg Leu Ile
85 90

<210> 30
<211> 147
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..147
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 30
Met Arg Ala Leu Leu Leu Leu Leu Ala Leu Leu Leu Ala Pro Leu Ala
1 5 10 15
Ala Pro Leu Ser Leu Lys Ser Pro Thr Gln Ser Pro Glu Glu Val Arg
20 25 30
Lys Cys Lys Phe Gln Glu Pro Trp Lys Phe Leu Ser Cys Tyr Lys Leu
35 40 45
Lys Ser Glu Met His Pro Ser Trp Ile Met Ile Val Gly Ile Val Asn
50 55 60
Ile Leu Ala Cys Thr Leu Phe Ser Phe Val Ile Tyr Pro Arg Phe Asp
65 70 75 80
Phe Gly Trp Asn Ala Pro Glu Ala Leu Trp Leu Pro Pro Asp Pro Asp
85 90 95
Thr Pro Pro Gln Gln Gln Gln Gln Asn Gln Ala Gln Ala His Ala Pro
100 105 110
Pro Gln Pro Arg Pro Gln Tyr Met Pro Ile Leu Asn Tyr Glu Ala Glu
115 120 125
Ala Gln Arg Ala Met Leu Pro Ala Ile Ser Tyr Phe Asn Leu Thr Gly
130 135 140
Gly Asp Asp
145

<210> 31
<211> 134
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..134
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 31
Met Thr Asp Pro Met Ala Asn Asn Thr Val Asn Asp Leu Leu Asp Met
1 5 10 15
Asp Gly Arg Ala Ser Glu Gln Arg Leu Ala Gln Leu Arg Ile Arg Gln
20 25 30
Gln Gln Glu Arg Ala Val Lys Glu Leu Gln Asp Ala Val Ala Ile His

```
        35                  40                  45
Gln Cys Lys Arg Gly Ile Phe Cys Leu Val Lys Gln Ala Lys Ile Ser
    50                  55                  60
Phe Glu Val Thr Ser Thr Asp His Arg Leu Ser Tyr Glu Leu Leu Gln
65                  70                  75                  80
Gln Arg Gln Lys Phe Thr Cys Leu Val Gly Val Asn Pro Ile Val Ile
                85                  90                  95
Thr Gln Gln Ser Gly Asp Thr Lys Gly Cys Ile His Cys Ser Cys Asp
            100                 105                 110
Ser Pro Glu Cys Val His Thr Leu Ile Lys Thr Leu Cys Gly Leu Arg
        115                 120                 125
Asp Leu Leu Pro Met Asn
    130
```

<210> 32
<211> 141
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..141
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 32

```
Met Ser Gly Asn Ser Ser Ile Met Thr Arg Ser Arg Thr Arg Leu Ala
1               5                   10                  15
Ser Ser Arg His His Pro Tyr Gln Pro Pro Ala Pro Leu Pro Arg Cys
            20                  25                  30
Glu Glu Thr Glu Thr Arg Ala Ser Leu Val Glu Asp His Pro Val Leu
        35                  40                  45
Pro Asp Cys Asp Thr Leu Ser Met His Asn Ile Thr Val Ile Pro Thr
    50                  55                  60
Thr Glu Asp Ser Pro Gln Leu Leu Asn Phe Glu Val Gln Met Gln Glu
65                  70                  75                  80
Cys Pro Glu Gly Phe Ile Ser Leu Thr Asp Pro Arg Leu Ala Arg Ser
                85                  90                  95
Glu Thr Val Trp Asn Val Glu Thr Lys Thr Met Ser Ile Thr Asn Gly
            100                 105                 110
Ile Gln Met Phe Lys Ala Val Arg Gly Glu Arg Val Val Tyr Ser Met
        115                 120                 125
Ser Trp Glu Gly Gly Gly Lys Ile Thr Thr Arg Ile Leu
    130                 135                 140
```

<210> 33
<211> 299
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..299
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 33

```
Met Ser Gly Asn Ser Ser Ile Met Thr Arg Ser Arg Thr Arg Leu Ala
1               5                   10                  15
Ser Ser Arg His His Pro Tyr Gln Pro Pro Ala Pro Leu Pro Arg Cys
            20                  25                  30
Glu Glu Thr Glu Thr Arg Ala Ser Leu Val Glu Asp His Pro Val Leu
        35                  40                  45
Pro Asp Cys Asp Thr Leu Ser Met His Asn Val Ser Cys Val Arg Gly
    50                  55                  60
Leu Pro Cys Ser Ala Gly Phe Thr Val Leu Gln Glu Phe Pro Val Pro
65                  70                  75                  80
Trp Asp Met Val Leu Thr Pro Glu Glu Leu Arg Val Leu Lys Thr Cys
```

```
                85                  90                  95
Met Ser Val Cys Leu Cys Cys Ala Asn Ile Asp Leu Phe Ser Ser Gln
            100                 105                 110
Leu Ile His Gly Arg Glu Arg Trp Val Leu His Cys His Cys Gln Asp
        115                 120                 125
Pro Gly Ser Leu Arg Cys Met Ala Gly Gly Ala Val Leu Ala Ile Trp
    130                 135                 140
Phe Arg Arg Ile Ile Gln Gly Cys Met Phe Asn Gln Arg Val Met Trp
145                 150                 155                 160
Tyr Arg Glu Val Val Asn Leu His Met Pro Lys Glu Ile Met Tyr Met
                165                 170                 175
Gly Ser Val Phe Trp Arg Gly Arg His Leu Ile Tyr Ile Arg Ile Trp
            180                 185                 190
Tyr Asp Gly His Val Gly Ser Ile Val Pro Gln Met Ser Phe Gly Trp
        195                 200                 205
Ser Thr Leu Asn Tyr Gly Leu Leu Asn Asn Leu Val Val Leu Cys Cys
    210                 215                 220
Thr Tyr Cys Ser Asp Leu Ser Glu Ile Arg Ile Arg Cys Cys Ala Arg
225                 230                 235                 240
Arg Thr Arg Arg Leu Met Leu Arg Ala Ile Gly Ile Met Arg Arg Glu
                245                 250                 255
Ser Leu Asp Pro Asp Pro Leu Ser Ser Ser Leu Thr Glu Arg Arg Arg
            260                 265                 270
Gln Arg Leu Leu Arg Gly Leu Met Arg His Asn Arg Pro Ile Pro Phe
        275                 280                 285
Ala Asp Tyr Asp Ser His Arg Ser Ser Ser Arg
    290                 295
```

<210> 34
<211> 122
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..122
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 34

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Met Val Leu Pro Val Leu Pro Ser Pro Ser Val Thr Glu Thr Gln Gln
1               5                   10                  15
Asn Cys Ile Ile Trp Leu Gly Leu Ala His Ser Thr Val Ala Asp Val
            20                  25                  30
Ile Arg Ala Ile Arg Ala Asp Gly Ile Phe Ile Thr Gln Glu Ala Gln
        35                  40                  45
Glu Ile Leu His Ala Leu Arg Glu Trp Leu Phe Tyr Asn Phe Asn Thr
    50                  55                  60
Glu Arg Ser Lys Arg Arg Asp Arg Arg Arg Arg Ala Val Cys Ser Ala
65                  70                  75                  80
Arg Thr Arg Phe Cys Phe Val Lys Tyr Glu Asn Val Arg Lys Gln Leu
                85                  90                  95
His His Asp Thr Ile Gln Asn Thr Ile Ser Val Ile Pro Pro Ser Ser
            100                 105                 110
Val Pro Thr Ala Gly Pro Leu Thr Ser Leu
        115                 120
```

<210> 35
<211> 117
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..117
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 35
Met Arg Val Cys Leu Arg Met Pro Val Glu Gly Ala Leu Arg Glu Leu
1 5 10 15
Phe Ile Met Ala Gly Leu Asp Leu Pro Gln Glu Leu Ile Arg Ile Ile
20 25 30
Gln Gly Trp Lys Asn Glu Asn Tyr Leu Gly Met Val Gln Glu Cys Asn
35 40 45
Met Met Ile Glu Glu Leu Glu Asn Ala Pro Ala Phe Ala Val Leu Leu
50 55 60
Phe Leu Asp Val Arg Val Glu Ala Leu Leu Glu Ala Thr Val Glu His
65 70 75 80
Leu Glu Asn Arg Val Thr Phe Asp Leu Ala Val Ile Phe His Gln His
85 90 95
Ser Gly Gly Glu Arg Cys His Leu Arg Asp Leu His Phe Glu Val Leu
100 105 110
Arg Asp Arg Leu Glu
115

<210> 36
<211> 129
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..129
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 36
Met Leu Glu Arg Thr Pro Cys Thr Tyr Ser Ile Val Val Pro Glu Ala
1 5 10 15
Leu Asn Leu His Leu Asp Asp Phe Ser Phe Val Asp Phe Leu Lys Asn
20 25 30
Cys Leu Pro Asp Phe Leu Ser Ser Tyr Leu Glu Asp Ile Thr Gly Ser
35 40 45
Ser Gln His Ala Tyr Phe Asn Leu Thr Phe Gly Asn Ala His Trp Gly
50 55 60
Gly Leu Arg Phe Ile Cys Asn Val Ala Cys Pro Ala Leu Ile Pro Gly
65 70 75 80
Gly Pro Met Ala Lys Asn Phe Gly Asp Asp Met Lys Asp Tyr Ile Gln
85 90 95
Leu Leu Leu Arg Glu Glu Leu Arg Asp Arg Gly Arg Asp Phe Asp Ile
100 105 110
Pro Ile Val Asn Leu Leu Gln Val Asn Gln Glu Gln Asn Leu Leu Glu
115 120 125
Leu

<210> 37
<211> 124
<212> PRT
<213> Chimpanzee adenovirus AdY25

<220>
<221> SOURCE
<222> 1..124
<223> /mol_type="protein"
/organism="Chimpanzee adenovirus AdY25"

<400> 37
Met Asp Ala Glu Ala Leu Tyr Val Phe Leu Glu Gly Ala Gly Ala Leu
1 5 10 15
Leu Pro Val Gln Glu Gly Ser Asn Tyr Ile Phe Tyr Ala Pro Ala Asn
20 25 30
Phe Val Leu His Pro His Gly Val Ala Leu Leu Glu Leu Arg Leu Ser
35 40 45
Ile Val Val Pro Arg Gly Phe Ile Gly Arg Phe Phe Ser Leu Thr Asp

```
    50                  55                  60
Ala Asn Val Pro Gly Val Tyr Ala Ser Ser Arg Ile Ile His Ala Gly
65                  70                  75                  80
His Arg Glu Gly Leu Ser Val Met Leu Phe Asn His Gly Asp Ser Phe
                85                  90                  95
Tyr Glu Gly Arg Ala Gly Asp Pro Val Ala Cys Leu Val Leu Glu Arg
            100                 105                 110
Val Ile Tyr Pro Pro Val Arg Gln Ala Ser Met Val
        115                 120
```

<210> 38
<211> 30964
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<222> 1..30964
<223> /mol_type="DNA"
/note="Viral vector based on Chimpanzee adenovirus AdY25"
/organism="Artificial Sequence"

<400> 38

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gcaaatgagg cgtttgaatt tgggaaggga ggaaggtgat tggccgagag aagggcgacc     120
gttaggggcg gggcgagtga cgttttgatg acgtgaccgc gaggaggagc cagtttgcaa     180
gttctcgtgg gaaaagtgac gtcaaacgag gtgtggtttg aacacggaaa tactcaattt     240
tcccgcgctc tctgacagga aatgaggtgt ttctaggcgg atgcaagtga aaacgggcca     300
ttttcgcgcg aaaactgaat gaggaagtga aaatctgagt aatttcgcgt ttatgacagg     360
gaggagtatt tgccgagggc cgagtagact ttgaccgatt acgtgggggt ttcgattacc     420
gtgtttttca cctaaatttc cgcgtacggt gtcaaagtcc ggtgttttta cgtaggtgtc     480
agctgatcgc cagggtattt aaacctgcgc tctccagtca agaggccact cttgagtgcc     540
agcgagaaga gttttctcct ccgcgcgcga gtcagatcta cactttgaaa ggcgatcgct     600
agcgacatcg atcacaagtt tgtacaaaaa agctgaacga gaaacgtaaa atgatataaa     660
tatcaatata ttaaattaga ttttgcataa aaaacagact acataatact gtaaaacaca     720
acatatccag tcactatggc ggccgccgat ttattcaaca aagccacgtt gtgtctcaaa     780
atctctgatg ttacattgca caagataaaa atatatcatc atgaacaata aaactgtctg     840
cttacataaa cagtaataca aggggtgtta tgagccatat tcaacgggaa acgtcttgct     900
cgaggccgcg attaaattcc aacatggatg ctgatttata tgggtataaa tgggctcgtg     960
ataatgtcgg gcaatcaggt gcgacaatct atcgattgta tgggaagccc gatgcgccag    1020
agttgtttct gaaacatggc aaaggtagcg ttgccaatga tgttacagat gagatggtca    1080
gactaaactg gctgacggaa tttatgcctc ttccgaccat caagcatttt atccgtactc    1140
ctgatgatgc atggttactc accactgcga tccccgggaa aacagcattc caggtattag    1200
aagaatatcc tgattcaggt gaaaatattg ttgatgcgct ggcagtgttc ctgcgccggt    1260
tgcattcgat tcctgtttgt aattgtcctt ttaacagcga tcgcgtattt cgtctcgctc    1320
aggcgcaatc acgaatgaat aacggtttgg ttgatgcgag tgattttgat gacgagcgta    1380
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atggctggcc tgttgaacaa gtctggaaag aaatgcataa gcttttgcca ttctcaccgg 1440
attcagtcgt cactcatggt gatttctcac ttgataacct tatttttgac gaggggaaat 1500
taataggttg tattgatgtt ggacgagtcg gaatcgcaga ccgataccag gatcttgcca 1560
tcctatggaa ctgcctcggt gagttttctc cttcattaca gaaacggctt tttcaaaaat 1620
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ctcaattcca gcaaagccac cccatgcgga tggagcacaa aattggcagg tgcgtaaaaa 30480

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<212> PRT
<213> Human adenovirus AdHu5

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Phe Glu Thr Glu Thr Arg Ala Thr Ile Leu Glu Asp His Pro Leu Leu
35 40 45
Pro Glu Cys Asn Thr Leu Thr Met His Asn Ala Trp Thr Ser Pro Ser
50 55 60
Pro Pro Val Lys Gln Pro Gln Val Gly Gln Gln Pro Val Ala Gln Gln
65 70 75 80
Leu Asp Ser Asp Met Asn Leu Ser Glu Leu Pro Gly Glu Phe Ile Asn
85 90 95
Ile Thr Asp Glu Arg Leu Ala Arg Gln Glu Thr Val Trp Asn Ile Thr
100 105 110
Pro Lys Asn Met Ser Val Thr His Asp Met Met Leu Phe Lys Ala Ser
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Arg Gly Glu Arg Thr Val Tyr Ser Val Cys Trp Glu Gly Gly Gly Arg
130 135 140

Leu Asn Thr Arg Val Leu
145 150

<210> 40
<211> 294
<212> PRT
<213> Human adenovirus AdHu5

<220>
<221> SOURCE
<222> 1..294
<223> /mol_type="protein"
/organism="Human adenovirus AdHu5"

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Phe Glu Thr Glu Thr Arg Ala Thr Ile Leu Glu Asp His Pro Leu Leu
35 40 45
Pro Glu Cys Asn Thr Leu Thr Met His Asn Val Ser Tyr Val Arg Gly
50 55 60
Leu Pro Cys Ser Val Gly Phe Thr Leu Ile Gln Glu Trp Val Val Pro
65 70 75 80
Trp Asp Met Val Leu Thr Arg Glu Glu Leu Val Ile Leu Arg Lys Cys
85 90 95
Met His Val Cys Leu Cys Cys Ala Asn Ile Asp Ile Met Thr Ser Met
100 105 110
Met Ile His Gly Tyr Glu Ser Trp Ala Leu His Cys His Cys Ser Ser
115 120 125
Pro Gly Ser Leu Gln Cys Ile Ala Gly Gly Gln Val Leu Ala Ser Trp
130 135 140
Phe Arg Met Val Val Asp Gly Ala Met Phe Asn Gln Arg Phe Ile Trp
145 150 155 160
Tyr Arg Glu Val Val Asn Tyr Asn Met Pro Lys Glu Val Met Phe Met
165 170 175
Ser Ser Val Phe Met Arg Gly Arg His Leu Ile Tyr Leu Arg Leu Trp
180 185 190
Tyr Asp Gly His Val Gly Ser Val Val Pro Ala Met Ser Phe Gly Tyr
195 200 205
Ser Ala Leu His Cys Gly Ile Leu Asn Asn Ile Val Val Leu Cys Cys
210 215 220
Ser Tyr Cys Ala Asp Leu Ser Glu Ile Arg Val Arg Cys Cys Ala Arg
225 230 235 240
Arg Thr Arg Arg Leu Met Leu Arg Ala Val Arg Ile Ile Ala Glu Glu
245 250 255
Thr Thr Ala Met Leu Tyr Ser Cys Arg Thr Glu Arg Arg Arg Gln Gln
260 265 270
Phe Ile Arg Ala Leu Leu Gln His His Arg Pro Ile Leu Met His Asp
275 280 285
Tyr Asp Ser Thr Pro Met
290

<210> 41
<211> 114
<212> PRT
<213> Human adenovirus AdHu5

<220>
<221> SOURCE
<222> 1..114
<223> /mol_type="protein"
/organism="Human adenovirus AdHu5"

<400> 41
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1 5 10 15

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            20                  25                  30
Ile Arg Ala Ala Ala His Glu Gly Val Tyr Ile Glu Pro Glu Ala Arg
        35                  40                  45
Gly Arg Leu Asp Ala Leu Arg Glu Trp Ile Tyr Tyr Asn Tyr Tyr Thr
    50                  55                  60
Glu Arg Ser Lys Arg Arg Asp Arg Arg Arg Arg Ser Val Cys His Ala
65                  70                  75                  80
Arg Thr Trp Phe Cys Phe Arg Lys Tyr Asp Tyr Val Arg Arg Ser Ile
                85                  90                  95
Trp His Asp Thr Thr Thr Asn Thr Ile Ser Val Val Ser Ala His Ser
            100                 105                 110
Val Gln
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<210> 42
<211> 1107
<212> DNA
<213> Mycobacterium tuberculosis

<220>
<221> source
<222> 1..1107
<223> /mol_type="DNA"
/note="Ag85A"
/organism="Mycobacterium tuberculosis"

<220>
<221> CDS
<222> 1..1107

<220>
<221> sig_peptide
<222> 1..102
<223> /note="signal peptide from human tissue plasminogen activator (tPA)"

<220>
<221> misc_feature
<222> 1072..1104
<223> /note="PK tag"

<400> 42

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gtcagaggcg ccgtgaccgg catgagcaga cggctggtcg tgggagctgt cggagccgct     180

ctggtgtctg gactcgtggg agccgtgggc ggaacagcta cagccggcgc tttcagcaga     240

cccggcctgc ccgtggaata tctgcaggtc cccagcccca gcatgggccg ggacatcaag     300

gtgcagttcc agtctggcgg agccaacagc cctgctctgt acctgctgga cggcctgaga     360

gcccaggacg acttcagcgg ctgggacatc aacacccccg ccttcgagtg gtacgaccag     420

agcggcctgt ctgtggtcat gcctgtgggc ggccagagca gcttctacag cgactggtat     480

cagcccgctt gtggcaaggc cggctgccag acctacaagt gggagacatt cctgaccagc     540

gagctgcccg gctggctgca ggccaacaga cacgtgaagc ccaccggctc tgccgtcgtg     600

ggcctgtcta tggctgccag ctctgccctg accctggcca tctaccaccc ccagcagttc     660

gtgtacgctg gcgccatgtc tggcctgctg gatccttctc aggccatggg acccaccctg     720

atcggactgg ctatgggaga tgccggcgga tacaaggcca gcgacatgtg gggccctaaa     780
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gaggaccccg cctggcagag aaacgacccc ctgctgaacg tgggcaagct gatcgccaac 840

aacaccagag tgtgggtgta ctgcggcaac ggcaagctga gcgacctggg cggcaacaac 900

ctgcccgcca agttcctgga aggcttcgtg cggaccagca acatcaagtt ccaggacgcc 960

tacaacgctg gcggcggaca caacggcgtg ttcgacttcc ccgacagcgg cacccacagc 1020

tgggagtatt ggggagccca gctgaatgcc atgaagcccg acctgcagag aggcagcatc 1080

cctaatcctc tgctgggcct ggactga 1107

<210> 43
<211> 368
<212> PRT
<213> Mycobacterium tuberculosis

<220>
<221> SOURCE
<222> 1..368
<223> /mol_type="protein"
/note="Ag85A"
/organism="Mycobacterium tuberculosis"

<400> 43

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Gly Ser Met Gln Leu Val Asp Arg Val Arg Gly Ala Val Thr Gly Met
        35                  40                  45
Ser Arg Arg Leu Val Val Gly Ala Val Gly Ala Ala Leu Val Ser Gly
    50                  55                  60
Leu Val Gly Ala Val Gly Gly Thr Ala Thr Ala Gly Ala Phe Ser Arg
65                  70                  75                  80
Pro Gly Leu Pro Val Glu Tyr Leu Gln Val Pro Ser Pro Ser Met Gly
                85                  90                  95
Arg Asp Ile Lys Val Gln Phe Gln Ser Gly Gly Ala Asn Ser Pro Ala
            100                 105                 110
Leu Tyr Leu Leu Asp Gly Leu Arg Ala Gln Asp Asp Phe Ser Gly Trp
        115                 120                 125
Asp Ile Asn Thr Pro Ala Phe Glu Trp Tyr Asp Gln Ser Gly Leu Ser
    130                 135                 140
Val Val Met Pro Val Gly Gly Gln Ser Ser Phe Tyr Ser Asp Trp Tyr
145                 150                 155                 160
Gln Pro Ala Cys Gly Lys Ala Gly Cys Gln Thr Tyr Lys Trp Glu Thr
                165                 170                 175
Phe Leu Thr Ser Glu Leu Pro Gly Trp Leu Gln Ala Asn Arg His Val
            180                 185                 190
Lys Pro Thr Gly Ser Ala Val Val Gly Leu Ser Met Ala Ala Ser Ser
        195                 200                 205
Ala Leu Thr Leu Ala Ile Tyr His Pro Gln Gln Phe Val Tyr Ala Gly
    210                 215                 220
Ala Met Ser Gly Leu Leu Asp Pro Ser Gln Ala Met Gly Pro Thr Leu
225                 230                 235                 240
Ile Gly Leu Ala Met Gly Asp Ala Gly Gly Tyr Lys Ala Ser Asp Met
                245                 250                 255
Trp Gly Pro Lys Glu Asp Pro Ala Trp Gln Arg Asn Asp Pro Leu Leu
            260                 265                 270
Asn Val Gly Lys Leu Ile Ala Asn Asn Thr Arg Val Trp Val Tyr Cys
        275                 280                 285
Gly Asn Gly Lys Leu Ser Asp Leu Gly Gly Asn Asn Leu Pro Ala Lys
    290                 295                 300
Phe Leu Glu Gly Phe Val Arg Thr Ser Asn Ile Lys Phe Gln Asp Ala
305                 310                 315                 320
Tyr Asn Ala Gly Gly Gly His Asn Gly Val Phe Asp Phe Pro Asp Ser
                325                 330                 335
Gly Thr His Ser Trp Glu Tyr Trp Gly Ala Gln Leu Asn Ala Met Lys
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340 345 350
Pro Asp Leu Gln Arg Gly Ser Ile Pro Asn Pro Leu Leu Gly Leu Asp
355 360 365

<210> 44
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> SOURCE
<222> 1..9
<223> /mol_type="protein"
/note="Synthetic peptide corresponding to known immunodominant CD
8+ T cell H-2d restricted epitopes in Ag85A"
/organism="Artificial Sequence"

<400> 44
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<210> 45
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<221> SOURCE
<222> 1..20
<223> /mol_type="protein"
/note="Synthetic peptide corresponding to the known immunodominant
CD4+ T cell H-2d restricted epitopes in Ag85A"
/organism="Artificial Sequence"

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Thr Phe Leu Thr Ser Glu Leu Pro Gly Trp Leu Gln Ala Asn Arg His
1 5 10 15
Val Lys Pro Thr
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<210> 46
<211> 2274
<212> DNA
<213> Unknown

<220>
<221> source
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<223> /mol_type="DNA"
/note="Influenza A virus nucleoprotein and matrix protein 1"
/organism="Unknown"

<220>
<221> CDS
<222> 1..2274

<220>
<221> misc_feature
<222> 1495..1515
<223> /function="Linker"

<220>
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<222> 1..1494
<223> /note="Nucleoprotein sequence"

<220>
<221> misc_feature

<222> 1516..2274
<223> /note="Matrix protein 1 sequence"

<400> 46

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atccagatgt gcaccgagct gaagctgtcc gactacgagg gccggctgat ccagaacagc 180

ctgaccatcg agaagatggt gctgtccgcc ttcgacgagc ggcggaacag atacctggaa 240

gagcacccca gcgccggcaa ggaccccaag aaaaccggcg gacccatcta ccggcgggtg 300

gacggcaagt ggatgcggga gctggtgctg tacgacaaag aggaaatccg gcggatctgg 360

cggcaggcca acaacggcga ggacgccaca gccggcctga cccacatgat gatctggcac 420

agcaacctga acgacaccac ctaccagcgg accagggccc tcgtgcggac cggcatggac 480

ccccggatgt gcagcctgat gcagggcagc acactgccca gaagaagcgg agctgccgga 540

gccgccgtga agggcatcgg caccatggtg atggaactga tccggatggt gaagcggggc 600

atcaacgacc ggaatttttg gaggggcgag aacggcagaa agactagaag cgcctacgag 660

cggatgtgca acatcctgaa gggcaagttc cagacagccg cccagcgggc catggtggac 720

caggtccggg agagccggaa ccccggcaac gccgagatcg aggacctgat cttcctggcc 780

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ggaccaggcg gcggaatgag cctgctgacc gaggtggaga cctacgtgct gtccatcgtg 1560

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accaagggca tcctgggctt cgtgttcacc ctgaccgtgc ccagcgagcg gggcctgcag 1740

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gccgtgaagc tgtaccggaa gctgaagcgg gagatcacct tccacggcgc caaagagatc 1860

gccctgagct acagcgccgg agccctggcc agctgcatgg gcctgatcta caaccggatg 1920

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agcgagcagg ccgccgaagc catggaaatc gccagccagg ccagacagat ggtgcaggcc 2160

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<211> 757
<212> PRT
<213> Unknown

<220>
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<222> 1..757
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/note="Influenza A virus nucleoprotein and matrix protein 1"
/organism="Unknown"

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Ile Asp Gly Ile Gly Arg Phe Tyr Ile Gln Met Cys Thr Glu Leu Lys
35 40 45
Leu Ser Asp Tyr Glu Gly Arg Leu Ile Gln Asn Ser Leu Thr Ile Glu
50 55 60
Lys Met Val Leu Ser Ala Phe Asp Glu Arg Arg Asn Arg Tyr Leu Glu
65 70 75 80
Glu His Pro Ser Ala Gly Lys Asp Pro Lys Lys Thr Gly Gly Pro Ile
85 90 95
Tyr Arg Arg Val Asp Gly Lys Trp Met Arg Glu Leu Val Leu Tyr Asp
100 105 110
Lys Glu Glu Ile Arg Arg Ile Trp Arg Gln Ala Asn Asn Gly Glu Asp
115 120 125
Ala Thr Ala Gly Leu Thr His Met Met Ile Trp His Ser Asn Leu Asn
130 135 140
Asp Thr Thr Tyr Gln Arg Thr Arg Ala Leu Val Arg Thr Gly Met Asp
145 150 155 160
Pro Arg Met Cys Ser Leu Met Gln Gly Ser Thr Leu Pro Arg Arg Ser
165 170 175
Gly Ala Ala Gly Ala Ala Val Lys Gly Ile Gly Thr Met Val Met Glu
180 185 190
Leu Ile Arg Met Val Lys Arg Gly Ile Asn Asp Arg Asn Phe Trp Arg
195 200 205
Gly Glu Asn Gly Arg Lys Thr Arg Ser Ala Tyr Glu Arg Met Cys Asn
210 215 220
Ile Leu Lys Gly Lys Phe Gln Thr Ala Ala Gln Arg Ala Met Val Asp
225 230 235 240
Gln Val Arg Glu Ser Arg Asn Pro Gly Asn Ala Glu Ile Glu Asp Leu
245 250 255
Ile Phe Leu Ala Arg Ser Ala Leu Ile Leu Arg Gly Ser Val Ala His
260 265 270
Lys Ser Cys Leu Pro Ala Cys Val Tyr Gly Pro Ala Val Ser Ser Gly
275 280 285
Tyr Asp Phe Glu Lys Glu Gly Tyr Ser Leu Val Gly Ile Asp Pro Phe
290 295 300
Lys Leu Leu Gln Asn Ser Gln Val Tyr Ser Leu Ile Arg Pro Asn Glu
305 310 315 320
Asn Pro Ala His Lys Ser Gln Leu Val Trp Met Ala Cys His Ser Ala
325 330 335

Ala Phe Glu Asp Leu Arg Leu Leu Ser Phe Ile Arg Gly Thr Lys Val
340 345 350
Ser Pro Arg Gly Lys Leu Ser Thr Arg Gly Val Gln Ile Ala Ser Asn
355 360 365
Glu Asn Met Asp Asn Met Gly Ser Ser Thr Leu Glu Leu Arg Ser Gly
370 375 380
Tyr Trp Ala Ile Arg Thr Arg Ser Gly Gly Asn Thr Asn Gln Gln Arg
385 390 395 400
Ala Ser Ala Gly Gln Ile Ser Val Gln Pro Thr Phe Ser Val Gln Arg
405 410 415
Asn Leu Pro Phe Glu Lys Ser Thr Val Met Ala Ala Phe Thr Gly Asn
420 425 430
Thr Glu Gly Arg Thr Ser Asp Met Arg Ala Glu Ile Ile Arg Met Met
435 440 445
Glu Gly Ala Lys Pro Glu Glu Val Ser Phe Arg Gly Arg Gly Val Phe
450 455 460
Glu Leu Ser Asp Glu Lys Ala Thr Asn Pro Ile Val Pro Ser Phe Glu
465 470 475 480
Met Ser Asn Glu Gly Ser Tyr Phe Phe Gly Asp Asn Ala Glu Glu Tyr
485 490 495
Asp Asn Gly Gly Gly Pro Gly Gly Gly Met Ser Leu Leu Thr Glu Val
500 505 510
Glu Thr Tyr Val Leu Ser Ile Val Pro Ser Gly Pro Leu Lys Ala Glu
515 520 525
Ile Ala Gln Arg Leu Glu Asp Val Phe Ala Gly Lys Asn Thr Asp Leu
530 535 540
Glu Ala Leu Met Glu Trp Leu Lys Thr Arg Pro Ile Leu Ser Pro Leu
545 550 555 560
Thr Lys Gly Ile Leu Gly Phe Val Phe Thr Leu Thr Val Pro Ser Glu
565 570 575
Arg Gly Leu Gln Arg Arg Arg Phe Val Gln Asn Ala Leu Asn Gly Asn
580 585 590
Gly Asp Pro Asn Asn Met Asp Lys Ala Val Lys Leu Tyr Arg Lys Leu
595 600 605
Lys Arg Glu Ile Thr Phe His Gly Ala Lys Glu Ile Ala Leu Ser Tyr
610 615 620
Ser Ala Gly Ala Leu Ala Ser Cys Met Gly Leu Ile Tyr Asn Arg Met
625 630 635 640
Gly Ala Val Thr Thr Glu Val Ala Phe Gly Leu Val Cys Ala Thr Cys
645 650 655
Glu Gln Ile Ala Asp Ser Gln His Arg Ser His Arg Gln Met Val Ala
660 665 670
Thr Thr Asn Pro Leu Ile Lys His Glu Asn Arg Met Val Leu Ala Ser
675 680 685
Thr Thr Ala Lys Ala Met Glu Gln Met Ala Gly Ser Ser Glu Gln Ala
690 695 700
Ala Glu Ala Met Glu Ile Ala Ser Gln Ala Arg Gln Met Val Gln Ala
705 710 715 720
Met Arg Thr Val Gly Thr His Pro Ser Ser Ser Thr Gly Leu Arg Asp
725 730 735
Asp Leu Leu Glu Asn Leu Gln Thr Tyr Gln Lys Arg Met Gly Val Gln
740 745 750
Met Gln Arg Phe Lys
755

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<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> SOURCE
<222> 1..9
<223> /mol_type="protein"
/note="Synthetic peptide corresponding to known immunodominant CD
8+ T cell H-2d restricted epitope in NP"
/organism="Artificial Sequence"

<400> 48
Thr Tyr Gln Arg Thr Arg Ala Leu Val
1 5

<210> 49
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> SOURCE
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<400> 49
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1 5