eolf-seql
SEQUENCE LISTING

<110> Bavarian Nordic AS, BN

<120> COMPOSITIONS AND METHODS FOR INDUCING AN ENHANCED IMMUNE RESPONSE

<130> BN0086PCT

<150> EP13005541.1
<151> 2013-11-28

<160> 9

<170> PatentIn version 3.5

<210> 1
<211> 352
<212> PRT
<213> Monkeypox virus

<220>
<221> Accession No. Q5IXK2; IFN-alpha/beta-receptor-like secreted glycoprotein
<222> (1)..(352)

<400> 1

Met Met Lys Met Lys Met Met Val Arg Ile Tyr Phe Val Ser Leu Ser
1 5 10 15

Leu Leu Leu Phe His Ser Tyr Ala Ile Asp Ile Glu Asn Glu Ile Thr
20 25 30

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

Trp Leu Asn Pro Val Cys Met Phe Gly Gly Thr Met Asn Asp Met Ala
50 55 60

Ala Leu Gly Glu Pro Phe Ser Ala Lys Cys Pro Pro Ile Glu Asp Ser
65 70 75 80

Leu Leu Ser His Arg Tyr Lys Asp Tyr Val Val Lys Trp Glu Arg Leu
85 90 95

```
Glu Lys Asn Arg Arg Arg Gln Val Ser Asn Lys Arg Val Lys His Gly
            100                 105                 110

Asp Leu Trp Ile Ala Asn Tyr Thr Ser Lys Phe Ser Asn Arg Arg Tyr
        115                 120                 125

Leu Cys Thr Val Thr Thr Lys Asn Gly Asp Cys Val Gln Gly Val Val
    130                 135                 140

Arg Ser His Val Trp Lys Pro Ser Ser Cys Ile Pro Lys Thr Tyr Glu
145                 150                 155                 160

Leu Gly Thr Tyr Asp Lys Tyr Gly Ile Asp Leu Tyr Cys Gly Ile Leu
                165                 170                 175

Tyr Ala Lys His Tyr Asn Asn Ile Thr Trp Tyr Lys Asp Asn Lys Glu
            180                 185                 190

Ile Asn Ile Asp Asp Phe Lys Tyr Ser Gln Ala Gly Lys Glu Leu Ile
        195                 200                 205

Ile His Asn Pro Glu Leu Glu Asp Ser Gly Arg Tyr Asp Cys Tyr Val
    210                 215                 220

His Tyr Asp Asp Val Arg Ile Lys Asn Asp Ile Val Val Ser Arg Cys
225                 230                 235                 240

Lys Ile Leu Thr Val Ile Pro Ser Gln Asp His Arg Phe Lys Leu Ile
                245                 250                 255

Leu Asp Pro Lys Ile Asn Val Thr Ile Gly Glu Pro Ala Asn Ile Thr
            260                 265                 270

Cys Ser Ala Val Ser Thr Ser Leu Phe Val Asp Asp Val Leu Ile Glu
        275                 280                 285

Trp Lys Asn Pro Ser Gly Trp Ile Ile Gly Leu Asp Phe Gly Val Tyr
    290                 295                 300
```

Ser Ile Leu Thr Ser Arg Gly Gly Ile Thr Glu Ala Thr Leu Tyr Phe
305 310 315 320

Glu Asn Val Thr Glu Glu Tyr Ile Gly Asn Thr Tyr Thr Cys Arg Gly
325 330 335

His Asn Tyr Tyr Phe Asp Lys Thr Leu Thr Thr Thr Val Val Leu Glu
340 345 350

<210> 2
<211> 351
<212> PRT
<213> Vaccinia virus, strain Western Reserve

<220>
<221> Accession No. P25213, Soluble interferon alpha/beta receptor B19
<222> (1)..(351)

<400> 2

Met Thr Met Lys Met Met Val His Ile Tyr Phe Val Ser Leu Leu Leu
1 5 10 15

Leu Leu Phe His Ser Tyr Ala Ile Asp Ile Glu Asn Glu Ile Thr Glu
20 25 30

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

Leu Asn Pro Ala Cys Met Phe Gly Gly Thr Met Asn Asp Ile Ala Ala
50 55 60

Leu Gly Glu Pro Phe Ser Ala Lys Cys Pro Pro Ile Glu Asp Ser Leu
65 70 75 80

Leu Ser His Arg Tyr Lys Asp Tyr Val Val Lys Trp Glu Arg Leu Glu
85 90 95

Lys Asn Arg Arg Arg Gln Val Ser Asn Lys Arg Val Lys His Gly Asp
100 105 110

```
Leu Trp Ile Ala Asn Tyr Thr Ser Lys Phe Ser Asn Arg Arg Tyr Leu
        115                 120                 125


Cys Thr Val Thr Thr Lys Asn Gly Asp Cys Val Gln Gly Ile Val Arg
    130                 135                 140


Ser His Ile Arg Lys Pro Pro Ser Cys Ile Pro Lys Thr Tyr Glu Leu
145                 150                 155                 160


Gly Thr His Asp Lys Tyr Gly Ile Asp Leu Tyr Cys Gly Ile Leu Tyr
                165                 170                 175


Ala Lys His Tyr Asn Asn Ile Thr Trp Tyr Lys Asp Asn Lys Glu Ile
            180                 185                 190


Asn Ile Asp Asp Ile Lys Tyr Ser Gln Thr Gly Lys Glu Leu Ile Ile
        195                 200                 205


His Asn Pro Glu Leu Glu Asp Ser Gly Arg Tyr Asp Cys Tyr Val His
    210                 215                 220


Tyr Asp Asp Val Arg Ile Lys Asn Asp Ile Val Val Ser Arg Cys Lys
225                 230                 235                 240


Ile Leu Thr Val Ile Pro Ser Gln Asp His Arg Phe Lys Leu Ile Leu
                245                 250                 255


Asp Pro Lys Ile Asn Val Thr Ile Gly Glu Pro Ala Asn Ile Thr Cys
            260                 265                 270


Thr Ala Val Ser Thr Ser Leu Leu Ile Asp Asp Val Leu Ile Glu Trp
        275                 280                 285


Glu Asn Pro Ser Gly Trp Leu Ile Gly Phe Asp Phe Asp Val Tyr Ser
    290                 295                 300


Val Leu Thr Ser Arg Gly Gly Ile Thr Glu Ala Thr Leu Tyr Phe Glu
305                 310                 315                 320
```

Asn Val Thr Glu Glu Tyr Ile Gly Asn Thr Tyr Lys Cys Arg Gly His
325 330 335

Asn Tyr Tyr Phe Glu Lys Thr Leu Thr Thr Thr Val Val Leu Glu
340 345 350

<210> 3
<211> 351
<212> PRT
<213> Vaccinia virus, strain Copenhagen

<220>
<221> Accession No. Q5CAD5: IFN-alpha-beta-receptor-like secreted glycoprotein; Vaccinia virus, strain Copenhagen
<222> (1)..(351)

<220>
<221> Accession No. Q5CAD5: IFN-alpha-beta-receptor-like secreted glycoprotein
<222> (1)..(351)

<400> 3

Met Thr Met Lys Met Met Val His Ile Tyr Phe Val Ser Leu Leu Leu
1 5 10 15

Leu Leu Phe His Ser Tyr Ala Ile Asp Ile Glu Asn Glu Ile Thr Glu
20 25 30

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

Leu Asn Pro Ala Cys Met Phe Gly Gly Thr Met Asn Asp Ile Ala Ala
50 55 60

Leu Gly Glu Pro Phe Ser Ala Lys Cys Pro Pro Ile Glu Asp Ser Leu
65 70 75 80

Leu Ser His Arg Tyr Lys Asp Tyr Val Val Lys Trp Glu Arg Leu Glu
85 90 95

Lys Asn Arg Arg Arg Gln Val Ser Asn Lys Arg Val Lys His Gly Asp
100 105 110

```
Leu Trp Ile Ala Asn Tyr Thr Ser Lys Phe Ser Asn Arg Arg Tyr Leu
        115                 120                 125

Cys Thr Val Thr Thr Lys Asn Gly Asp Cys Val Gln Gly Ile Val Arg
    130                 135                 140

Ser His Ile Lys Lys Pro Pro Ser Cys Ile Pro Lys Thr Tyr Glu Leu
145                 150                 155                 160

Gly Thr His Asp Lys Tyr Gly Ile Asp Leu Tyr Cys Gly Ile Leu Tyr
                165                 170                 175

Ala Lys His Tyr Asn Asn Ile Thr Trp Tyr Lys Asp Asn Lys Glu Ile
            180                 185                 190

Asn Ile Asp Asp Ile Lys Tyr Ser Gln Thr Gly Lys Lys Leu Ile Ile
        195                 200                 205

His Asn Pro Glu Leu Glu Asp Ser Gly Arg Tyr Asn Cys Tyr Val His
    210                 215                 220

Tyr Asp Asp Val Arg Ile Lys Asn Asp Ile Val Val Ser Arg Cys Lys
225                 230                 235                 240

Ile Leu Thr Val Ile Pro Ser Gln Asp His Arg Phe Lys Leu Ile Leu
                245                 250                 255

Asp Pro Lys Ile Asn Val Thr Ile Gly Glu Pro Ala Asn Ile Thr Cys
            260                 265                 270

Thr Ala Val Ser Thr Ser Leu Leu Ile Asp Asp Val Leu Ile Glu Trp
        275                 280                 285

Glu Asn Pro Ser Gly Trp Leu Ile Gly Phe Asp Phe Asp Val Tyr Ser
    290                 295                 300

Val Leu Thr Ser Arg Gly Gly Ile Thr Glu Ala Thr Leu Tyr Phe Glu
305                 310                 315                 320
```

Asn Val Thr Glu Glu Tyr Ile Gly Asn Thr Tyr Lys Cys Arg Gly His
325 330 335

Asn Tyr Tyr Phe Glu Lys Thr Leu Thr Thr Thr Val Val Leu Glu
340 345 350

<210> 4
<211> 353
<212> PRT
<213> Vaccinia virus, strain Ankara (CVA)

<220>
<221> Accession No. A9J168: Soluble and cell surface interferon-alpha/beta receptor;
<222> (1)..(353)

<400> 4

Met Lys Met Thr Met Lys Met Met Val His Ile Tyr Phe Val Ser Leu
1 5 10 15

Leu Leu Leu Leu Phe His Ser Tyr Ala Ile Asp Ile Glu Asn Glu Ile
20 25 30

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

Lys Trp Leu Asn Pro Ala Cys Met Phe Gly Gly Thr Met Asn Asp Ile
50 55 60

Ala Ala Leu Gly Glu Pro Phe Ser Ala Lys Cys Pro Pro Ile Glu Asp
65 70 75 80

Ser Leu Leu Ser His Arg Tyr Lys Asp Tyr Val Val Lys Trp Glu Arg
85 90 95

Leu Glu Lys Asn Arg Arg Arg Gln Val Ser Asn Lys Arg Val Lys His
100 105 110

Gly Asp Leu Trp Ile Ala Asn Tyr Thr Ser Lys Phe Ser Asn Arg Arg

```
        115                 120                 125

Tyr Leu Cys Thr Val Thr Thr Lys Asn Gly Asp Cys Val Gln Gly Ile
    130                 135                 140

Val Arg Ser His Ile Lys Lys Pro Pro Ser Cys Ile Pro Lys Thr Tyr
145                 150                 155                 160

Glu Leu Gly Thr His Asp Lys Tyr Gly Ile Asp Leu Tyr Cys Gly Ile
                165                 170                 175

Leu Tyr Ala Lys His Tyr Asn Asn Ile Thr Trp Tyr Lys Asp Asn Lys
            180                 185                 190

Glu Ile Asn Ile Asp Asp Ile Lys Tyr Ser Gln Thr Gly Lys Lys Leu
        195                 200                 205

Ile Ile His Asn Pro Glu Leu Glu Asp Ser Gly Arg Tyr Asn Cys Tyr
    210                 215                 220

Val His Tyr Asp Asp Val Lys Ile Lys Asn Asp Ile Val Val Ser Arg
225                 230                 235                 240

Cys Lys Ile Leu Thr Val Ile Pro Ser Gln Asp His Arg Phe Lys Leu
                245                 250                 255

Ile Leu Asp Pro Lys Ile Asn Val Thr Ile Gly Glu Pro Ala Asn Ile
            260                 265                 270

Thr Cys Thr Ala Val Ser Thr Ser Leu Leu Ile Asp Asp Val Leu Ile
        275                 280                 285

Glu Trp Glu Asn Pro Ser Gly Trp Leu Ile Gly Phe Asp Phe Asp Val
    290                 295                 300

Tyr Ser Val Leu Thr Ser Arg Gly Gly Ile Thr Glu Ala Thr Leu Tyr
305                 310                 315                 320

Phe Glu Asn Val Thr Glu Glu Tyr Ile Gly Asn Thr Tyr Lys Cys Arg
```

eolf-seql

325 330 335

Gly His Asn Tyr Tyr Phe Glu Lys Thr Leu Thr Thr Thr Val Val Leu
340 345 350

Glu

<210> 5
<211> 358
<212> PRT
<213> Ectromelia virus

<220>
<221> Accession No. Q9JFS5: IFN-alpha/beta binding protein
<222> (1)..(358)

<400> 5

Met Met Lys Met Thr Met Lys Met Met Val Arg Ile Tyr Phe Val Ser
1 5 10 15

Leu Ser Leu Ser Leu Ser Leu Leu Leu Phe His Ser Tyr Ala Ile Asp
20 25 30

Ile Glu Asn Glu Ile Thr Glu Phe Phe Asn Lys Met Arg Asp Thr Leu
35 40 45

Pro Ala Lys Asp Ser Lys Trp Leu Asn Pro Ser Cys Met Phe Gly Gly
50 55 60

Thr Met Asn Asp Met Ala Ala Leu Gly Glu Pro Phe Ser Ala Lys Cys
65 70 75 80

Pro Pro Ile Glu Asp Ser Leu Leu Ser His Arg Tyr Asn Asp Lys Asp
85 90 95

Asn Val Val Asn Trp Glu Lys Ile Gly Lys Thr Arg Arg Pro Leu Asn
100 105 110

Arg Arg Val Lys Asn Gly Asp Leu Trp Ile Ala Asn Tyr Thr Ser Asn

```
        115                 120                 125

Asp Ser His Arg Arg Tyr Leu Cys Thr Val Thr Thr Lys Asn Gly Asp
    130                 135                 140

Cys Val Gln Gly Ile Val Arg Ser His Ile Arg Lys Pro Pro Ser Cys
145                 150                 155                 160

Ile Pro Glu Thr Tyr Glu Leu Gly Thr His Asp Lys Tyr Gly Ile Asp
                165                 170                 175

Leu Tyr Cys Gly Ile Leu Tyr Ala Lys His Tyr Asn Asn Ile Thr Trp
            180                 185                 190

Tyr Lys Asn Asn Gln Glu Leu Ile Ile Asp Gly Thr Lys Tyr Ser Gln
        195                 200                 205

Ser Gly Gln Asn Leu Ile Ile His Asn Pro Glu Leu Glu Asp Ser Gly
    210                 215                 220

Arg Tyr Asp Cys Tyr Val His Tyr Asp Asp Val Arg Ile Lys Asn Asp
225                 230                 235                 240

Ile Val Val Ser Arg Cys Lys Ile Leu Thr Val Ile Pro Ser Gln Asp
                245                 250                 255

His Arg Phe Lys Leu Ile Leu Asp Pro Lys Ile Asn Val Thr Ile Gly
            260                 265                 270

Glu Pro Ala Asn Ile Thr Cys Thr Ala Val Ser Thr Ser Leu Leu Val
        275                 280                 285

Asp Asp Val Leu Ile Asp Trp Glu Asn Pro Ser Gly Trp Ile Ile Gly
    290                 295                 300

Leu Asp Phe Gly Val Tyr Ser Ile Leu Thr Ser Ser Gly Gly Ile Thr
305                 310                 315                 320

Glu Ala Thr Leu Tyr Phe Glu Asn Val Thr Glu Glu Tyr Ile Gly Asn
```

eolf-seql

325 330 335

Thr Tyr Thr Cys Arg Gly His Asn Tyr Tyr Phe Asp Lys Thr Leu Thr
340 345 350

Thr Thr Val Val Leu Glu
355

<210> 6
<211> 357
<212> PRT
<213> Cowpox virus

<220>
<221> Accession No. Q5CAC3: Soluble interferon-alpha/beta receptor
<222> (1)..(357)

<400> 6

Met Lys Met Thr Met Lys Met Met Val His Ile Tyr Phe Val Ser Leu
1 5 10 15

Ser Leu Ser Leu Ser Leu Leu Leu Phe His Ser Tyr Ala Ile Asp Ile
20 25 30

Glu Asn Glu Ile Thr Glu Phe Phe Asn Lys Met Lys Asp Thr Leu Pro
35 40 45

Ala Lys Asp Ser Lys Trp Leu Asn Pro Ala Cys Met Phe Gly Gly Thr
50 55 60

Met Asn Asp Met Ala Ala Ile Gly Glu Pro Phe Ser Ala Lys Cys Pro
65 70 75 80

Pro Ile Glu Asp Ser Leu Leu Ser His Arg Tyr Lys Asp Lys Asp Asn
85 90 95

Val Val Asn Trp Glu Lys Ile Gly Lys Thr Arg Arg Pro Leu Asn Arg
100 105 110

Arg Val Lys Asn Gly Asp Leu Trp Ile Ala Asn Tyr Thr Ser Asn Asp

```
        115                 120                 125

Ser Arg Arg Arg Tyr Leu Cys Thr Val Ile Thr Lys Asn Gly Asp Cys
    130                 135                 140

Ile Gln Gly Ile Val Arg Ser His Val Arg Lys Pro Ser Ser Cys Ile
145                 150                 155                 160

Pro Glu Ile Tyr Glu Leu Gly Thr His Asp Lys Tyr Gly Ile Asp Leu
                165                 170                 175

Tyr Cys Gly Ile Ile Tyr Ala Lys His Tyr Asn Asn Ile Thr Trp Tyr
            180                 185                 190

Lys Asp Asn Lys Glu Ile Asn Ile Asp Asp Ile Lys Tyr Ser Gln Thr
        195                 200                 205

Gly Lys Glu Leu Ile Ile His Asn Pro Ala Leu Glu Asp Ser Gly Arg
    210                 215                 220

Tyr Asp Cys Tyr Val His Tyr Asp Asp Val Arg Ile Lys Asn Asp Ile
225                 230                 235                 240

Val Val Ser Arg Cys Lys Ile Leu Thr Val Ile Pro Ser Gln Asp His
                245                 250                 255

Arg Phe Lys Leu Ile Leu Asp Pro Lys Ile Asn Val Thr Ile Gly Glu
            260                 265                 270

Pro Ala Asn Ile Thr Cys Thr Ala Val Ser Thr Ser Leu Leu Val Asp
        275                 280                 285

Asp Val Leu Ile Glu Trp Glu Asn Pro Ser Gly Trp Leu Ile Gly Phe
    290                 295                 300

Asp Phe Asp Val Tyr Ser Val Leu Thr Ser Arg Gly Gly Ile Thr Glu
305                 310                 315                 320

Ala Thr Leu Tyr Phe Glu Asn Val Thr Glu Glu Tyr Ile Gly Asn Thr
```

eolf-seql

325 330 335

Tyr Lys Cys Arg Gly His Asn Tyr Tyr Phe Glu Lys Thr Leu Thr Thr
340 345 350

Thr Val Val Leu Glu
355

<210> 7
<211> 355
<212> PRT
<213> Camelpox virus

<220>
<221> Accession No. Q5CA87: Soluble interferon-alpha/beta receptor
<222> (1)..(355)

<400> 7

Met Lys Met Thr Met Lys Met Met Val His Ile Tyr Phe Val Ser Leu
1 5 10 15

Ser Leu Ser Leu Leu Leu Phe His Ser Tyr Ala Ile Asp Ile Glu Asn
20 25 30

Glu Ile Thr Asp Phe Phe Asn Lys Met Lys Asp Ile Leu Pro Thr Lys
35 40 45

Asp Ser Lys Trp Leu Asn Pro Ala Cys Met Phe Gly Gly Thr Thr Asn
50 55 60

Asp Met Ala Ala Ile Gly Glu Pro Phe Ser Ala Lys Cys Pro Pro Ile
65 70 75 80

Glu Asp Ser Leu Leu Ser His Arg Tyr Lys Asn Lys Asp Asn Val Val
85 90 95

Asn Trp Glu Lys Ile Gly Lys Thr Lys Arg Pro Leu Asn Arg Arg Val
100 105 110

Lys Asn Gly Asp Leu Trp Ile Ala Asn Tyr Thr Ser Asn Asp Ser Arg

```
        115                 120                 125

Arg Arg Tyr Leu Cys Thr Ala Ile Thr Lys Asn Gly Asp Cys Ile Gln
    130                 135                 140

Gly Ile Ile Arg Ser His Val Arg Lys Pro Ser Ser Cys Ile Pro Glu
145                 150                 155                 160

Ile Tyr Glu Leu Gly Thr His Asp Lys Tyr Gly Ile Asp Leu Tyr Cys
                165                 170                 175

Gly Ile Ile Tyr Ala Lys His Tyr Asn Asn Ile Thr Trp Tyr Lys Asp
            180                 185                 190

Asn Lys Glu Ile Asn Ile Asp Asp Ile Lys Tyr Ser Gln Thr Gly Lys
        195                 200                 205

Glu Leu Ile Ile His Asn Pro Ala Leu Glu Asp Ser Gly Arg Tyr Asp
    210                 215                 220

Cys Tyr Val His Tyr Asp Asp Val Arg Ile Lys Asn Asp Ile Val Val
225                 230                 235                 240

Ser Arg Cys Lys Ile Leu Thr Val Thr Pro Ser Gln Asp His Arg Phe
                245                 250                 255

Lys Leu Ile Leu Asp Pro Lys Ile Asn Val Thr Ile Gly Glu Pro Ala
            260                 265                 270

Asn Ile Thr Cys Thr Ala Val Ser Thr Ser Leu Leu Val Asp Asp Val
        275                 280                 285

Leu Ile Glu Trp Glu Asn Pro Ser Gly Trp Leu Ile Gly Phe Asp Phe
    290                 295                 300

Asp Val Tyr Ser Val Leu Thr Ser Arg Gly Gly Ile Thr Glu Ala Thr
305                 310                 315                 320

Leu Tyr Phe Glu Asn Val Thr Glu Glu Tyr Ile Gly Asn Thr Tyr Lys
```

eolf-seql

325 330 335

Cys Arg Gly His Asn Tyr Tyr Phe Glu Lys Thr Leu Thr Thr Thr Val
340 345 350

Val Leu Glu
355

<210> 8
<211> 344
<212> PRT
<213> Swinepox virus, strain Swine/Nebraska/17077-99/1999

<220>
<221> Accession No. Q8V3G4: IFN-alpha/beta-like binding protein
<222> (1)..(344)

<400> 8

Met Ile Ser Ile Lys Lys Tyr Asn Ile Leu Leu Phe Ile Ile Ser Phe
1 5 10 15

Ile Tyr Cys Ser Ala Asp Asn Asp Ile Asp Ser Leu Tyr Glu Gly Tyr
20 25 30

Lys Glu Phe Leu Asp Pro Lys Leu Lys Gln Phe Leu Asn Asp Asn Cys
35 40 45

Thr Tyr Arg Gly Tyr Arg Asp Phe Phe Leu Tyr Asn Glu Glu Pro Ala
50 55 60

Asn Ile Lys Cys Pro Leu Leu Asn Asp Ile Leu Leu Arg Gln Lys Tyr
65 70 75 80

His Asn Tyr Thr Ile Leu Trp Lys Lys Leu Gly Glu Arg Ser Ser Arg
85 90 95

Leu Leu Asn Thr His Gly Ser Ile Phe Leu Asp Phe Phe Pro Tyr Lys
100 105 110

Ser Glu Leu Arg Gly Ser Val Tyr Glu Cys Met Ile Ile Leu Asn Asn

```
        115                 120                 125

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

Val Cys Tyr His Asn Asp Tyr Lys Val His Thr Asn Ile Glu Ile Phe
145                 150                 155                 160

Cys Asn Val Ile Asn Leu Gln Tyr Asp Tyr Ile Thr Trp Tyr Lys Asn
                165                 170                 175

Asn Ser Glu Ile Ile Ile Asp Gly Tyr Lys Tyr Ser Asn Gln Ser Arg
            180                 185                 190

Arg Leu Leu Val Tyr Asn Thr Thr Tyr Asn Asp Ser Gly Ile Tyr Tyr
        195                 200                 205

Cys Asn Ala Tyr Thr Thr His Gly Lys Asn Thr Tyr Ile Ser Arg Arg
    210                 215                 220

Cys Ser Ser Val Ser Ile His Ser His Ser Tyr Tyr Asp Phe Tyr Ile
225                 230                 235                 240

Glu His Ile Asn Asn Ile Thr Tyr Ile Asp Pro Asp Ser Glu Asn Thr
                245                 250                 255

Gln Ile Tyr Cys Lys Ala Ile Ser Tyr Ser Asn Ser Ser Tyr Ile Leu
            260                 265                 270

Ile Tyr Trp Glu Asp Glu Tyr Gly Gly Tyr Ile Tyr Asp Asn Gly Ile
        275                 280                 285

Tyr Gln Tyr Asp Asn Ile Thr Leu Ile Gly Asn Glu Lys Val Tyr Met
    290                 295                 300

Ser Ile Leu Val Leu Glu Lys Ser Ala Tyr Tyr Arg Tyr Val Asn Asn
305                 310                 315                 320

Thr Phe Thr Cys Leu Ala Thr Ser Val Tyr Val Glu Lys Lys Thr Thr
```

325 330 335

Thr Thr Leu Val Ile Lys Lys Thr
340

<210> 9
<211> 351
<212> PRT
<213> Tanapox virus

<220>
<221> Accession No. A7XCS4: Type-I IFN receptor
<222> (1)..(351)

<400> 9

Met Lys Ile Thr Tyr Ile Ile Leu Leu Ile Cys Lys Glu Ile Ile Cys
1 5 10 15

Asp Asn Ser Gly Asp Asp Met Tyr Asp Tyr Ile Ala Asn Gly Asn Ile
20 25 30

Asp Tyr Leu Lys Thr Ile Asp Asn Asp Ile Ile Asn Leu Val Asn Lys
35 40 45

Asn Cys Ser Phe Arg Glu Ile Lys Thr Thr Leu Ala Lys Glu Asn Glu
50 55 60

Val Leu Met Leu Lys Cys Pro Gln Leu Asp Asn Tyr Ile Leu Pro Trp
65 70 75 80

Lys Tyr Met Asn Arg Ser Glu Tyr Thr Val Thr Trp Lys Asn Ile Ser
85 90 95

Asn Ser Thr Glu Tyr Asn Asn Thr Arg Ile Glu Asn Asn Met Leu Met
100 105 110

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

Val Ser Thr Asn Lys Ser Cys Asp Gln Ser Val Val Ile Val Lys Lys

```
    130                 135                 140

Ser Phe Tyr Ser Asn Asn Cys Met Leu Ser Glu Ala Lys Glu Asn Asp
145                 150                 155                 160

Asn Phe Glu Ile Tyr Cys Gly Ile Leu His Ala Lys Tyr Asn Thr Ile
                165                 170                 175

Lys Trp Phe Lys Glu Glu Lys Glu Ile Thr Asn Asn Tyr Lys Tyr Tyr
            180                 185                 190

Thr Lys Leu Gly Gly Tyr Val Lys Gly Ile Asn Asn Val Thr Tyr Ser
        195                 200                 205

Asp Ser Gly Lys Tyr Val Cys Glu Gly Tyr Tyr Ile Asp Val Leu Lys
    210                 215                 220

Asn Ile Thr Tyr Thr Ala Lys Arg Cys Val Asn Leu Thr Val Ile Pro
225                 230                 235                 240

Asn Thr Tyr Tyr Asp Phe Phe Ile Val Asp Ile Pro Asn Val Thr Tyr
                245                 250                 255

Ala Lys Asn Asn Lys Lys Leu Glu Val Asn Cys Thr Ser Phe Val Asp
            260                 265                 270

Ile Asn Ser Tyr Asp Tyr Ile Leu Thr Ser Trp Leu Tyr Asn Gly Leu
        275                 280                 285

Tyr Leu Pro Leu Gly Val Arg Ile Tyr Gln Leu Tyr Ser Thr Asp Ile
    290                 295                 300

Phe Phe Glu Asn Phe Ile Tyr Arg Thr Ser Thr Leu Val Phe Glu Asn
305                 310                 315                 320

Val Asp Ile Ser Asp Asp Asn Lys Thr Phe Glu Cys Glu Ala Leu Ser
                325                 330                 335

Val Thr Leu Lys Lys Ile Lys Tyr Thr Thr Ile Lys Val Glu Lys
```

340 345 350