SEQUENCE LISTING

<110> Istituto Superiore di Sanità

<120> Nucleotide sequence expressing an exosome-anchoring protein for use as vaccine

<130> PCT40823

<150> IT 102016000101794
<151> 2016-10-11

<160> 20

<170> PatentIn version 3.5

<210> 1
<211> 206
<212> PRT
<213> Human immunodeficiency virus type 1

<400> 1

```
Met Gly Cys Lys Trp Ser Lys Ser Ser Val Val Gly Trp Pro Ala Val
1               5                  10                  15


Arg Glu Arg Met Arg Arg Ala Glu Pro Ala Ala Asp Gly Val Gly Ala
            20                  25                  30


Ala Ser Arg Asp Leu Glu Lys His Gly Ala Ile Thr Ser Ser Asn Thr
        35                  40                  45


Ala Ala Thr Asn Ala Asp Cys Ala Trp Leu Glu Ala Gln Glu Glu Glu
    50                  55                  60


Glu Val Gly Phe Pro Val Thr Pro Gln Val Pro Leu Arg Pro Met Thr
65                  70                  75                  80


Tyr Lys Ala Ala Val Asp Leu Ser His Phe Leu Lys Glu Lys Gly Gly
                85                  90                  95


Leu Glu Gly Leu Ile His Ser Gln Arg Arg Gln Asp Ile Leu Asp Leu
            100                 105                 110


Trp Ile Tyr His Thr Gln Gly Tyr Phe Pro Asp Trp Gln Asn Tyr Pro
```

115 120 125

Thr Gly Pro Gly Ile Arg Tyr Pro Leu Thr Phe Gly Trp Cys Tyr Lys
130 135 140

Leu Val Pro Val Glu Pro Glu Lys Leu Glu Glu Ala Asn Lys Gly Glu
145 150 155 160

Asn Thr Ser Leu Leu His Pro Val Ser Leu His Gly Met Asp Asp Pro
165 170 175

Gly Arg Glu Val Leu Glu Trp Arg Phe Asp Ser Arg Leu Ala Phe His
180 185 190

His Val Ala Arg Glu Leu His Pro Glu Tyr Phe Lys Asn Cys
195 200 205

<210> 2
<211> 621
<212> DNA
<213> Human immunodeficiency virus type 1

<400> 2
atgggttgca agtggtcaaa aagtagtgtg gttggatggc ctgctgtaag ggaaagaatg 60

agacgagctg agccagcagc agatggggtg ggagcagcat ctcgagacct agaaaaacat 120

ggagcaatca caagtagcaa tacagcagct accaatgctg attgtgcctg gctagaagca 180

caagaggagg aggaggtggg ttttccagtc acacctcagg tacctttaag accaatgact 240

tacaaggcag ctgtagatct tagccacttt ttaaaagaaa aggggggact ggaagggcta 300

attcactccc aacgaagaca agatatcctt gatctgtgga tctaccacac acaaggctac 360

ttccctgatt ggcagaacta cacaccagga ccaggggtta gatatccact gacctttgga 420

tggtgctaca agctagtacc agttgagcca gagaagttag aagaagccaa caaaggagag 480

aacaccagct tgttacaccc tgtgagcctg catggaatgg atgacccggc gagagaagtg 540

ttagagtgga ggtttgacag ccgcctagca tttcatcacg tggcccgaga gctgcatccg 600

gagtacttca agaactgctg a 621

<210> 3
<211> 8
<212> PRT
<213> Human papillomavirus type 16

<400> 3

Asp Leu Tyr Cys Tyr Glu Gln Leu
1 5

<210> 4
<211> 9
<212> PRT
<213> Human papillomavirus type 16

<400> 4

Arg Ala His Tyr Asn Ile Val Thr Phe
1 5

<210> 5
<211> 9
<212> PRT
<213> Human immunodeficiency virus type 1

<400> 5

Thr Ala Ala Thr Asn Ala Asp Cys Ala
1 5

<210> 6
<211> 9
<212> PRT
<213> Human papillomavirus type 16

<400> 6

Lys Leu Pro Gln Leu Cys Thr Glu Leu
1 5

<210> 7
<211> 8
<212> PRT
<213> Human papillomavirus type 16

<400> 7

Tyr Asp Phe Ala Phe Arg Asp Leu

1 5

<210> 8
<211> 10
<212> PRT
<213> Ebola virus

<400> 8

Lys Phe Ile Asn Lys Leu Asp Ala Leu His
1 5 10

<210> 9
<211> 9
<212> PRT
<213> Ebola virus

<400> 9

Asp Ala Val Leu Tyr Tyr His Met Met
1 5

<210> 10
<211> 16
<212> PRT
<213> Ebola virus

<400> 10

Leu Arg Ile Gly Asn Gln Ala Phe Leu Gln Glu Phe Val Leu Pro Pro
1 5 10 15

<210> 11
<211> 11
<212> PRT
<213> Ebola virus

<400> 11

Val Tyr Gln Val Asn Asn Leu Glu Glu Ile Cys
1 5 10

<210> 12
<211> 9
<212> PRT
<213> Ebola virus

<400> 12

Asp Ala Val Leu Tyr Tyr His Met Met
1 5

<210> 13
<211> 8
<212> PRT
<213> Hepatitis C virus

<400> 13

Ile Thr Gln Met Tyr Thr Asn Val
1 5

<210> 14
<211> 11
<212> PRT
<213> Hepatitis C virus

<400> 14

Trp Tyr Glu Leu Thr Pro Ala Glu Thr Ser Val
1 5 10

<210> 15
<211> 9
<212> PRT
<213> West Nile virus

<400> 15

Gly Tyr Ile Ser Thr Lys Val Glu Leu
1 5

<210> 16
<211> 15
<212> PRT
<213> West Nile virus

<400> 16

Asp Arg Arg Trp Cys Phe Asp Gly Pro Arg Thr Asn Thr Ile Leu
1 5 10 15

<210> 17
<211> 9

<212> PRT
<213> Influenza virus

<400> 17

Ala Ser Asn Glu Asn Met Glu Thr Met
1 5

<210> 18
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> forward primer

<400> 18
ctagctagca cccaagtgtg taccggc 27

<210> 19
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> reverse primer

<400> 19
ccggaattct cagtgggtca gttgatggg 29

<210> 20
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> HLA-A.02-restricted MART-1

<400> 20

Ala Ala Gly Ile Gly Ile Leu Thr Val
1 5