SEQUENCE LISTING

<110> Ganymed Pharmaceuticals AG

<120> Antibodies useful in cancer diagnosis

<130> 342-70 PCT

<150> PCT/EP2012/001991
<151> 2012-05-09

<160> 25

<170> PatentIn version 3.5

<210> 1
<211> 261
<212> PRT
<213> Homo sapiens

<400> 1

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Met Ser Thr Thr Thr Cys Gln Val Val Ala Phe Leu Leu Ser Ile Leu
1               5                  10                  15

Gly Leu Ala Gly Cys Ile Ala Ala Thr Gly Met Asp Met Trp Ser Thr
            20                  25                  30

Gln Asp Leu Tyr Asp Asn Pro Val Thr Ser Val Phe Gln Tyr Glu Gly
        35                  40                  45

Leu Trp Arg Ser Cys Val Arg Gln Ser Ser Gly Phe Thr Glu Cys Arg
    50                  55                  60

Pro Tyr Phe Thr Ile Leu Gly Leu Pro Ala Met Leu Gln Ala Val Arg
65                  70                  75                  80

Ala Leu Met Ile Val Gly Ile Val Leu Gly Ala Ile Gly Leu Leu Val
                85                  90                  95

Ser Ile Phe Ala Leu Lys Cys Ile Arg Ile Gly Ser Met Glu Asp Ser
            100                 105                 110

Ala Lys Ala Asn Met Thr Leu Thr Ser Gly Ile Met Phe Ile Val Ser
        115                 120                 125

Gly Leu Cys Ala Ile Ala Gly Val Ser Val Phe Ala Asn Met Leu Val
    130                 135                 140

Thr Asn Phe Trp Met Ser Thr Ala Asn Met Tyr Thr Gly Met Gly Gly
145                 150                 155                 160

Met Val Gln Thr Val Gln Thr Arg Tyr Thr Phe Gly Ala Ala Leu Phe
                165                 170                 175

Val Gly Trp Val Ala Gly Gly Leu Thr Leu Ile Gly Gly Val Met Met
            180                 185                 190
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```
Cys Ile Ala Cys Arg Gly Leu Ala Pro Glu Glu Thr Asn Tyr Lys Ala
        195                 200                 205

Val Ser Tyr His Ala Ser Gly His Ser Val Ala Tyr Lys Pro Gly Gly
    210                 215                 220

Phe Lys Ala Ser Thr Gly Phe Gly Ser Asn Thr Lys Asn Lys Lys Ile
225                 230                 235                 240

Tyr Asp Gly Gly Ala Arg Thr Glu Asp Glu Val Gln Ser Tyr Pro Ser
                245                 250                 255

Lys His Asp Tyr Val
            260
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<210> 2
<211> 261
<212> PRT
<213> Homo sapiens

<400> 2

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Met Ala Val Thr Ala Cys Gln Gly Leu Gly Phe Val Val Ser Leu Ile
1               5                   10                  15

Gly Ile Ala Gly Ile Ile Ala Ala Thr Cys Met Asp Gln Trp Ser Thr
            20                  25                  30

Gln Asp Leu Tyr Asn Asn Pro Val Thr Ala Val Phe Asn Tyr Gln Gly
        35                  40                  45

Leu Trp Arg Ser Cys Val Arg Glu Ser Ser Gly Phe Thr Glu Cys Arg
    50                  55                  60

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

Ala Leu Met Ile Val Gly Ile Val Leu Gly Ala Ile Gly Leu Leu Val
                85                  90                  95

Ser Ile Phe Ala Leu Lys Cys Ile Arg Ile Gly Ser Met Glu Asp Ser
            100                 105                 110

Ala Lys Ala Asn Met Thr Leu Thr Ser Gly Ile Met Phe Ile Val Ser
        115                 120                 125

Gly Leu Cys Ala Ile Ala Gly Val Ser Val Phe Ala Asn Met Leu Val
    130                 135                 140

Thr Asn Phe Trp Met Ser Thr Ala Asn Met Tyr Thr Gly Met Gly Gly
145                 150                 155                 160
```

```
Met Val Gln Thr Val Gln Thr Arg Tyr Thr Phe Gly Ala Ala Leu Phe
                165                 170                 175

Val Gly Trp Val Ala Gly Gly Leu Thr Leu Ile Gly Gly Val Met Met
            180                 185                 190

Cys Ile Ala Cys Arg Gly Leu Ala Pro Glu Glu Thr Asn Tyr Lys Ala
        195                 200                 205

Val Ser Tyr His Ala Ser Gly His Ser Val Ala Tyr Lys Pro Gly Gly
    210                 215                 220

Phe Lys Ala Ser Thr Gly Phe Gly Ser Asn Thr Lys Asn Lys Lys Ile
225                 230                 235                 240

Tyr Asp Gly Gly Ala Arg Thr Glu Asp Glu Val Gln Ser Tyr Pro Ser
                245                 250                 255

Lys His Asp Tyr Val
            260
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<210> 3
<211> 264
<212> PRT
<213> Mus musculus

<400> 3

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Met Ser Val Thr Ala Cys Gln Gly Leu Gly Phe Val Val Ser Leu Ile
1               5                   10                  15

Gly Phe Ala Gly Ile Ile Ala Ala Thr Cys Met Asp Gln Trp Ser Thr
            20                  25                  30

Gln Asp Leu Tyr Asn Asn Pro Val Thr Ala Val Phe Asn Tyr Gln Gly
        35                  40                  45

Leu Trp Arg Ser Cys Val Arg Glu Ser Ser Gly Phe Thr Glu Cys Arg
    50                  55                  60

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

Ala Leu Met Ile Val Gly Ile Val Leu Gly Val Ile Gly Ile Leu Val
                85                  90                  95

Ser Ile Phe Ala Leu Lys Cys Ile Arg Ile Gly Ser Met Asp Asp Ser
            100                 105                 110

Ala Lys Ala Lys Met Thr Leu Thr Ser Gly Ile Leu Phe Ile Ile Ser
        115                 120                 125
```

```
Gly Ile Cys Ala Ile Ile Gly Val Ser Val Phe Ala Asn Met Leu Val
    130                 135                 140

Thr Asn Phe Trp Met Ser Thr Ala Asn Met Tyr Ser Gly Met Gly Gly
145                 150                 155                 160

Met Gly Gly Met Val Gln Thr Val Gln Thr Arg Tyr Thr Phe Gly Ala
                165                 170                 175

Ala Leu Phe Val Gly Trp Val Ala Gly Gly Leu Thr Leu Ile Gly Gly
            180                 185                 190

Val Met Met Cys Ile Ala Cys Arg Gly Leu Thr Pro Asp Asp Ser Asn
        195                 200                 205

Phe Lys Ala Val Ser Tyr His Ala Ser Gly Gln Asn Val Ala Tyr Arg
    210                 215                 220

Pro Gly Gly Phe Lys Ala Ser Thr Gly Phe Gly Ser Asn Thr Arg Asn
225                 230                 235                 240

Lys Lys Ile Tyr Asp Gly Gly Ala Arg Thr Glu Asp Asp Glu Gln Ser
                245                 250                 255

His Pro Thr Lys Tyr Asp Tyr Val
            260
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<210> 4
<211> 261
<212> PRT
<213> Artificial Sequence

<220>
<223> Consensus Sequence

<220>
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<222> (18)..(18)
<223> Variable Amino Acid

<400> 4

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Met Ser Val Thr Ala Cys Gln Gly Leu Gly Phe Val Val Ser Leu Ile
1               5                   10                  15

Gly Xaa Ala Gly Ile Ile Ala Ala Thr Cys Met Asp Gln Trp Ser Thr
            20                  25                  30

Gln Asp Leu Tyr Asn Asn Pro Val Thr Ala Val Phe Asn Tyr Gln Gly
        35                  40                  45

Leu Trp Arg Ser Cys Val Arg Glu Ser Ser Gly Phe Thr Glu Cys Arg
    50                  55                  60
```

```
Gly Tyr Phe Thr Leu Leu Gly Leu Pro Ala Met Leu Gln Ala Val Arg
65                  70                  75                  80

Ala Leu Met Ile Val Gly Ile Val Leu Gly Ala Ile Gly Leu Leu Val
                85                  90                  95

Ser Ile Phe Ala Leu Lys Cys Ile Arg Ile Gly Ser Met Glu Asp Ser
            100                 105                 110

Ala Lys Ala Asn Met Thr Leu Thr Ser Gly Ile Met Phe Ile Val Ser
        115                 120                 125

Gly Leu Cys Ala Ile Ala Gly Val Ser Val Phe Ala Asn Met Leu Val
    130                 135                 140

Thr Asn Phe Trp Met Ser Thr Ala Asn Met Tyr Thr Gly Met Gly Gly
145                 150                 155                 160

Met Val Gln Thr Val Gln Thr Arg Tyr Thr Phe Gly Ala Ala Leu Phe
                165                 170                 175

Val Gly Trp Val Ala Gly Gly Leu Thr Leu Ile Gly Gly Val Met Met
            180                 185                 190

Cys Ile Ala Cys Arg Gly Leu Ala Pro Glu Glu Thr Asn Tyr Lys Ala
        195                 200                 205

Val Ser Tyr His Ala Ser Gly His Ser Val Ala Tyr Lys Pro Gly Gly
    210                 215                 220

Phe Lys Ala Ser Thr Gly Phe Gly Ser Asn Thr Lys Asn Lys Lys Ile
225                 230                 235                 240

Tyr Asp Gly Gly Ala Arg Thr Glu Asp Glu Val Gln Ser Tyr Pro Ser
                245                 250                 255

Lys His Asp Tyr Val
            260
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<210> 5
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Peptide For Immunization

<400> 5

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Thr Glu Asp Glu Val Gln Ser Tyr Pro Ser Lys His Asp Tyr Val
1               5                   10                  15
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<210> 6
<211> 12

<212> PRT
<213> Artificial Sequence

<220>
<223> Peptide For Immunization

<400> 6

Glu Val Gln Ser Tyr Pro Ser Lys His Asp Tyr Val
1 5 10

<210> 7
<211> 134
<212> PRT
<213> Mus musculus

<400> 7

Met Ala Trp Val Trp Thr Leu Leu Phe Leu Met Ala Ala Ala Gln Ser
1 5 10 15

Ile Gln Ala Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys
20 25 30

Phe Gly Glu Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe
35 40 45

Thr Asp Tyr Ser Ile His Trp Val Lys Gln Ala Pro Gly Lys Gly Leu
50 55 60

Lys Trp Met Gly Trp Ile Asn Thr Glu Thr Gly Val Pro Thr Tyr Ala
65 70 75 80

Asp Asp Phe Lys Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala Ser
85 90 95

Thr Ala Tyr Leu Gln Ile Asn Asn Leu Lys Asn Glu Asp Thr Ala Thr
100 105 110

Tyr Phe Cys Ala Arg Arg Thr Gly Phe Asp Tyr Trp Gly Gln Gly Thr
115 120 125

Thr Leu Thr Val Ser Ser
130

<210> 8
<211> 8
<212> PRT
<213> Mus musculus

<400> 8

Gly Tyr Thr Phe Thr Asp Tyr Ser
1 5

<210> 9
<211> 8

<212> PRT
<213> Mus musculus

<400> 9

Ile Asn Thr Glu Thr Gly Val Pro
1 5

<210> 10
<211> 8
<212> PRT
<213> Mus musculus

<400> 10

Ala Arg Arg Thr Gly Phe Asp Tyr
1 5

<210> 11
<211> 132
<212> PRT
<213> Mus musculus

<400> 11

Met Arg Phe Ser Ala Gln Leu Leu Gly Leu Leu Val Leu Trp Ile Pro
1 5 10 15

Gly Ser Thr Ala Asp Ile Val Met Thr Gln Ala Ala Phe Ser Ile Pro
20 25 30

Val Thr Leu Gly Thr Ser Ala Ser Ile Ser Cys Arg Ser Ser Lys Asn
35 40 45

Leu Leu His Ser Asp Gly Ile Thr Tyr Leu Tyr Trp Tyr Leu Gln Arg
50 55 60

Pro Gly Gln Ser Pro Gln Leu Leu Ile Tyr Arg Val Ser Asn Leu Ala
65 70 75 80

Ser Gly Val Pro Asn Arg Phe Ser Gly Ser Glu Ser Gly Thr Asp Phe
85 90 95

Thr Leu Arg Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr
100 105 110

Cys Val Gln Val Leu Glu Leu Pro Phe Thr Phe Gly Gly Gly Thr Lys
115 120 125

Leu Glu Ile Lys
130

<210> 12
<211> 11
<212> PRT
<213> Mus musculus

<400> 12

Lys Asn Leu Leu His Ser Asp Gly Ile Thr Tyr
1 5 10

<210> 13
<211> 3
<212> PRT
<213> Mus musculus

<400> 13

Arg Val Ser
1

<210> 14
<211> 9
<212> PRT
<213> Mus musculus

<400> 14

Val Gln Val Leu Glu Leu Pro Phe Thr
1 5

<210> 15
<211> 140
<212> PRT
<213> Mus musculus

<400> 15

Met Asn Phe Gly Leu Ser Leu Ile Phe Leu Val Leu Val Leu Lys Gly
1 5 10 15

Val Gln Cys Glu Val His Leu Val Glu Ser Gly Gly Gly Leu Val Lys
20 25 30

Pro Gly Gly Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
35 40 45

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

Glu Trp Val Ala Thr Ile Ser Asp Gly Gly Ser Tyr Ser Tyr Tyr Pro
65 70 75 80

Asp Asn Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn
85 90 95

Asn Leu Tyr Leu Gln Met Ser His Leu Lys Ser Glu Asp Thr Ala Ile
100 105 110

Tyr Tyr Cys Ala Arg Asp Ser Tyr Tyr Asp Asn Ser Tyr Val Arg Asp
115 120 125

Tyr Trp Gly Gln Gly Thr Thr Leu Thr Val Ser Ser

130 135 140

<210> 16
<211> 8
<212> PRT
<213> Mus musculus

<400> 16

Gly Phe Thr Phe Ser Ser Tyr Ala
1 5

<210> 17
<211> 8
<212> PRT
<213> Mus musculus

<400> 17

Ile Ser Asp Gly Gly Ser Tyr Ser
1 5

<210> 18
<211> 14
<212> PRT
<213> Mus musculus

<400> 18

Ala Arg Asp Ser Tyr Tyr Asp Asn Ser Tyr Val Arg Asp Tyr
1 5 10

<210> 19
<211> 127
<212> PRT
<213> Mus musculus

<400> 19

Met Arg Thr Pro Ala Gln Phe Leu Gly Ile Leu Leu Leu Trp Phe Pro
1 5 10 15

Gly Ile Lys Cys Asp Ile Lys Met Thr Gln Ser Pro Ser Ser Met Tyr
20 25 30

Ala Ser Leu Gly Glu Arg Val Ser Ile Thr Cys Lys Ala Ser Gln Asp
35 40 45

Ile Asn Thr Phe Leu Ser Trp Phe Gln Gln Lys Pro Gly Lys Ser Pro
50 55 60

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

Arg Phe Ser Gly Ser Gly Ser Gly Gln Asp Tyr Ser Leu Thr Ile Ser
85 90 95

Ser Leu Asp Tyr Glu Asp Met Gly Ile Tyr Tyr Cys Leu Gln Tyr Asp

100 105 110

Glu Phe Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys
115 120 125

<210> 20
<211> 6
<212> PRT
<213> Mus musculus

<400> 20

Gln Asp Ile Asn Thr Phe
1 5

<210> 21
<211> 3
<212> PRT
<213> Mus musculus

<400> 21

Arg Thr Asn
1

<210> 22
<211> 9
<212> PRT
<213> Mus musculus

<400> 22

Leu Gln Tyr Asp Glu Phe Pro Leu Thr
1 5

<210> 23
<211> 330
<212> DNA
<213> Artificial Sequence

<220>
<223> Nucleic Acid Encoding Peptide For Immunization

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atgggtcggg atctgtacga cgatgacgat aaggatcgat ggggatccga gctcgagatg 120

atgtgcatcg cctgccgggg cctggcacca gaagaaacca actacaaagc cgtttcttat 180

catgcctcgg gccacagtgt tgcctacaag cctggaggct tcaaggccag cactggcttt 240

gggtccaaca ccaaaaacaa gaagatatac gatggaggtg cccgcacaga ggacgaggta 300

caatcttatc cttccaagca cgactatgtg 330

<210> 24
<211> 110
<212> PRT
<213> Artificial Sequence

<220>

<223> Peptide For Immunization

<400> 24

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Met Arg Gly Ser His His His His His His Gly Met Ala Ser Met Thr
1               5                  10                  15

Gly Gly Gln Gln Met Gly Arg Asp Leu Tyr Asp Asp Asp Asp Lys Asp
            20                  25                  30

Arg Trp Gly Ser Glu Leu Glu Met Met Cys Ile Ala Cys Arg Gly Leu
        35                  40                  45

Ala Pro Glu Glu Thr Asn Tyr Lys Ala Val Ser Tyr His Ala Ser Gly
    50                  55                  60

His Ser Val Ala Tyr Lys Pro Gly Gly Phe Lys Ala Ser Thr Gly Phe
65                  70                  75                  80

Gly Ser Asn Thr Lys Asn Lys Lys Ile Tyr Asp Gly Gly Ala Arg Thr
                85                  90                  95

Glu Asp Glu Val Gln Ser Tyr Pro Ser Lys His Asp Tyr Val
            100                 105                 110
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<210> 25
<211> 71
<212> PRT
<213> Artificial Sequence

<220>
<223> Peptide For Immunization

<400> 25

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Met Met Cys Ile Ala Cys Arg Gly Leu Ala Pro Glu Glu Thr Asn Tyr
1               5                  10                  15

Lys Ala Val Ser Tyr His Ala Ser Gly His Ser Val Ala Tyr Lys Pro
            20                  25                  30

Gly Gly Phe Lys Ala Ser Thr Gly Phe Gly Ser Asn Thr Lys Asn Lys
        35                  40                  45

Lys Ile Tyr Asp Gly Gly Ala Arg Thr Glu Asp Glu Val Gln Ser Tyr
    50                  55                  60

Pro Ser Lys His Asp Tyr Val
65                  70
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