

**International Patent Application**

**LMU080901PCT**

**Sequence Listing**

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LMU080901PEP ST25.txt  
SEQUENCE LISTING

<110> Ludwigs-Maximilians-Universitaet Muenchen  
<120> Proteins Ezrin, Serpin B5, Peroxiredoxin-2 and Heat shock protein  
beta-1 as autoantigens for psoriasis vulgaris and  
poststreptococcal diseases  
<130> LMU080901PEP  
<150> PCT/EP2008/001283  
<151> 2008-02-19  
  
<160> 325  
<170> PatentIn version 3.3  
  
<210> 1  
<211> 586  
<212> PRT  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<223> SEQ ID NO: 1 depicts the Sequence of Ezrin (Name of protein:  
Ezrin; Synonyms: p81, Cytovillin, Villin-2; Name of gene: VIL2;  
from Homo sapiens (TaxID: 9606); GI-Nummer: GI 31282;  
UniProtKB/Swiss-Prot entry P15311)

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Met Pro Lys Pro Ile Asn Val Arg Val Thr Thr Met Asp Ala Glu Leu  
1 5 10 15

Glu Phe Ala Ile Gln Pro Asn Thr Thr Gly Lys Gln Leu Phe Asp Gln  
20 25 30

Val Val Lys Thr Ile Gly Leu Arg Glu Val Trp Tyr Phe Gly Leu His  
35 40 45

Tyr Val Asp Asn Lys Gly Phe Pro Thr Trp Leu Lys Leu Asp Lys Lys  
50 55 60

Val Ser Ala Gln Glu Val Arg Lys Glu Asn Pro Leu Gln Phe Lys Phe  
65 70 75 80

Arg Ala Lys Phe Tyr Pro Glu Asp Val Ala Glu Glu Leu Ile Gln Asp  
85 90 95

Ile Thr Gln Lys Leu Phe Phe Leu Gln Val Lys Glu Gly Ile Leu Ser  
100 105 110

Asp Glu Ile Tyr Cys Pro Pro Glu Thr Ala Val Leu Leu Gly Ser Tyr  
115 120 125

Ala Val Gln Ala Lys Phe Gly Asp Tyr Asn Lys Glu Val His Lys Ser  
130 135 140

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Gly Tyr Leu Ser Ser Glu Arg Leu Ile Pro Gln Arg Val Met Asp Gln  
 145 150 155 160  
 His Lys Leu Thr Arg Asp Gln Trp Glu Asp Arg Ile Gln Val Trp His  
 165 170 175  
 Ala Glu His Arg Gly Met Leu Lys Asp Asn Ala Met Leu Glu Tyr Leu  
 180 185 190  
 Lys Ile Ala Gln Asp Leu Glu Met Tyr Gly Ile Asn Tyr Phe Glu Ile  
 195 200 205  
 Lys Asn Lys Lys Gly Thr Asp Leu Trp Leu Gly Val Asp Ala Leu Gly  
 210 215 220  
 Leu Asn Ile Tyr Glu Lys Asp Asp Lys Leu Thr Pro Lys Ile Gly Phe  
 225 230 235 240  
 Pro Trp Ser Glu Ile Arg Asn Ile Ser Phe Asn Asp Lys Lys Phe Val  
 245 250 255  
 Ile Lys Pro Ile Asp Lys Lys Ala Pro Asp Phe Val Phe Tyr Ala Pro  
 260 265 270  
 Arg Leu Arg Ile Asn Lys Arg Ile Leu Gln Leu Cys Met Gly Asn His  
 275 280 285  
 Glu Leu Tyr Met Arg Arg Arg Lys Pro Asp Thr Ile Glu Val Gln Gln  
 290 295 300  
 Met Lys Ala Gln Ala Arg Glu Glu Lys His Gln Lys Gln Leu Glu Arg  
 305 310 315 320  
 Gln Gln Leu Glu Thr Glu Lys Lys Arg Arg Glu Thr Val Glu Arg Glu  
 325 330 335  
 Lys Glu Gln Met Met Arg Glu Lys Glu Glu Leu Met Leu Arg Leu Gln  
 340 345 350  
 Asp Tyr Glu Glu Lys Thr Lys Lys Ala Glu Arg Glu Leu Ser Glu Gln  
 355 360 365  
 Ile Gln Arg Ala Leu Gln Leu Glu Glu Glu Arg Lys Arg Ala Gln Glu  
 370 375 380  
 Glu Ala Glu Arg Leu Glu Ala Asp Arg Met Ala Ala Leu Arg Ala Lys  
 385 390 395 400  
 Glu Glu Leu Glu Arg Gln Ala Val Asp Gln Ile Lys Ser Gln Glu Gln  
 405 410 415

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Leu Ala Ala Glu Leu Ala Glu Tyr Thr Ala Lys Ile Ala Leu Leu Glu  
420 425 430

Glu Ala Arg Arg Arg Lys Glu Asp Glu Val Glu Glu Trp Gln His Arg  
435 440 445

Ala Lys Glu Ala Gln Asp Asp Leu Val Lys Thr Lys Glu Glu Leu His  
450 455 460

Leu Val Met Thr Ala Pro Pro Pro Pro Pro Pro Val Tyr Glu Pro  
465 470 475 480

Val Ser Tyr His Val Gln Glu Ser Leu Gln Asp Glu Gly Ala Glu Pro  
485 490 495

Thr Gly Tyr Ser Ala Glu Leu Ser Ser Glu Gly Ile Arg Asp Asp Arg  
500 505 510

Asn Glu Glu Lys Arg Ile Thr Glu Ala Glu Lys Asn Glu Arg Val Gln  
515 520 525

Arg Gln Leu Leu Thr Leu Ser Ser Glu Leu Ser Gln Ala Arg Asp Glu  
530 535 540

Asn Lys Arg Thr His Asn Asp Ile Ile His Asn Glu Asn Met Arg Gln  
545 550 555 560

Gly Arg Asp Lys Tyr Lys Thr Leu Arg Gln Ile Arg Gln Gly Asn Thr  
565 570 575

Lys Gln Arg Ile Asp Glu Phe Glu Ala Leu  
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<210> 2  
<211> 375  
<212> PRT  
<213> Homo sapiens

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Serpin B5 [Precursor]; Synonyms: Maspin, Protease inhibitor 5;  
Name of gene: SERPINB5; Synonyms: PI5; from Homo sapiens (TaxID:  
9606); GI-Nummer: GI 142377273; UniProtKB/Swiss-Prot entry

<400> 2

Met Asp Ala Leu Gln Leu Ala Asn Ser Ala Phe Ala Val Asp Leu Phe  
1 5 10 15

Lys Gln Leu Cys Glu Lys Glu Pro Leu Gly Asn Val Leu Phe Ser Pro  
20 25 30

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

Asp Thr Ala Asn Glu Ile Gly Gln Val Leu His Phe Glu Asn Val Lys  
50 55 60

Asp Ile Pro Phe Gly Phe Gln Thr Val Thr Ser Asp Val Asn Lys Leu  
65 70 75 80

Ser Ser Phe Tyr Ser Leu Lys Leu Ile Lys Arg Leu Tyr Val Asp Lys  
85 90 95

Ser Leu Asn Leu Ser Thr Glu Phe Ile Ser Ser Thr Lys Arg Pro Tyr  
100 105 110

Ala Lys Glu Leu Glu Thr Val Asp Phe Lys Asp Lys Leu Glu Glu Thr  
115 120 125

Lys Gly Gln Ile Asn Asn Ser Ile Lys Asp Leu Thr Asp Gly His Phe  
130 135 140

Glu Asn Ile Leu Ala Asp Asn Ser Val Asn Asp Gln Thr Lys Ile Leu  
145 150 155 160

Val Val Asn Ala Ala Tyr Phe Val Gly Lys Trp Met Lys Lys Phe Pro  
165 170 175

Glu Ser Glu Thr Lys Glu Cys Pro Phe Arg Leu Asn Lys Thr Asp Thr  
180 185 190

Lys Pro Val Gln Met Met Asn Met Glu Ala Thr Phe Cys Met Gly Asn  
195 200 205

Ile Asp Ser Ile Asn Cys Lys Ile Ile Glu Leu Pro Phe Gln Asn Lys  
210 215 220

His Leu Ser Met Phe Ile Leu Leu Pro Lys Asp Val Glu Asp Glu Ser  
225 230 235 240

Thr Gly Leu Glu Lys Ile Glu Lys Gln Leu Asn Ser Glu Ser Leu Ser  
245 250 255

Gln Trp Thr Asn Pro Ser Thr Met Ala Asn Ala Lys Val Lys Leu Ser  
260 265 270

Ile Pro Lys Phe Lys Val Glu Lys Met Ile Asp Pro Lys Ala Cys Leu  
275 280 285

Glu Asn Leu Gly Leu Lys His Ile Phe Ser Glu Asp Thr Ser Asp Phe  
290 295 300

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Ser Gly Met Ser Glu Thr Lys Gly Val Ala Leu Ser Asn Val Ile His  
305 310 315 320

Lys Val Cys Leu Glu Ile Thr Glu Asp Gly Gly Asp Ser Ile Glu Val  
325 330 335

Pro Gly Ala Arg Ile Leu Gln His Lys Asp Glu Leu Asn Ala Asp His  
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Pro Phe Ile Tyr Ile Ile Arg His Asn Lys Thr Arg Asn Ile Ile Phe  
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Phe Gly Lys Phe Cys Ser Pro  
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<211> 198  
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<220>  
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protein: Peroxiredoxin-2; Synonyms: Thioredoxin peroxidase 1,  
etc; Name of gene: PRDX2; Synonyms: TDPX1; from Homo sapiens  
(TaxID: 9606); GI-Nummer: GI440307; UniProtKB/Swiss-Prot entry

<400> 3

Met Ala Ser Gly Asn Ala Arg Ile Gly Lys Pro Ala Pro Asp Phe Lys  
1 5 10 15

Ala Thr Ala Val Val Asp Gly Ala Phe Lys Glu Val Lys Leu Ser Asp  
20 25 30

Tyr Lys Gly Lys Tyr Val Val Leu Phe Phe Tyr Pro Leu Asp Phe Thr  
35 40 45

Phe Val Cys Pro Thr Glu Ile Ile Ala Phe Ser Asn Arg Ala Glu Asp  
50 55 60

Phe Arg Lys Leu Gly Cys Glu Val Leu Gly Val Ser Val Asp Ser Gln  
65 70 75 80

Phe Thr His Leu Ala Trp Ile Asn Thr Pro Arg Lys Glu Gly Gly Leu  
85 90 95

Gly Pro Leu Asn Ile Pro Leu Leu Ala Asp Val Thr Arg Arg Leu Ser  
100 105 110

Glu Asp Tyr Gly Val Leu Lys Thr Asp Glu Gly Ile Ala Tyr Arg Gly  
115 120 125

LMU080901PEP ST25.txt

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

Asp Leu Pro Val Gly Arg Ser Val Asp Glu Ala Leu Arg Leu Val Gln  
145 150 155 160

Ala Phe Gln Tyr Thr Asp Glu His Gly Glu Val Cys Pro Ala Gly Trp  
165 170 175

Lys Pro Gly Ser Asp Thr Ile Lys Pro Asn Val Asp Asp Ser Lys Glu  
180 185 190

Tyr Phe Ser Lys His Asn  
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(Name of protein: Heat shock protein beta-1; Synonyms: HspB1,  
etc; Name of gene: HSPB1; Synonyms HSP27; from Homo sapiens  
(TaxID: 9606); GI-Nummer: GI32477; UniProtKB/Swiss-Prot entry

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Met Thr Glu Arg Arg Val Pro Phe Ser Leu Leu Arg Gly Pro Ser Trp  
1 5 10 15

Asp Pro Phe Arg Asp Trp Tyr Pro His Ser Arg Leu Phe Asp Gln Ala  
20 25 30

Phe Gly Leu Pro Arg Leu Pro Glu Glu Trp Ser Gln Trp Leu Gly Gly  
35 40 45

Ser Ser Trp Pro Gly Tyr Val Arg Pro Leu Pro Pro Ala Ala Ile Glu  
50 55 60

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

Leu Ser Ser Gly Val Ser Glu Ile Arg His Thr Ala Asp Arg Trp Arg  
85 90 95

Val Ser Leu Asp Val Asn His Phe Ala Pro Asp Glu Leu Thr Val Lys  
100 105 110

Thr Lys Asp Gly Val Val Glu Ile Thr Gly Lys His Glu Glu Arg Gln  
115 120 125

LMU080901PEP ST25.txt

Asp Glu His Gly Tyr Ile Ser Arg Cys Phe Thr Arg Lys Tyr Thr Leu  
130 135 140

Pro Pro Gly Val Asp Pro Thr Gln Val Ser Ser Ser Leu Ser Pro Glu  
145 150 155 160

Gly Thr Leu Thr Val Glu Ala Pro Met Pro Lys Leu Ala Thr Gln Ser  
165 170 175

Asn Glu Ile Thr Ile Pro Val Thr Phe Glu Ser Arg Ala Gln Leu Gly  
180 185 190

Gly Pro Glu Ala Ala Lys Ser Asp Glu Thr Ala Ala Lys  
195 200 205

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<400> 5

Met Gly Asn His Glu Leu Tyr Met Arg Arg Arg Lys Pro Asp Thr Ile  
1 5 10 15

Glu Val Gln Gln Met Lys Ala Gln Ala Arg Glu Glu Lys His Gln Lys  
20 25 30

Gln Leu Glu Arg Gln  
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<210> 6  
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<212> PRT  
<213> Homo sapiens

<400> 6

Arg Lys Pro Asp Thr Ile Glu Val Gln Gln Met Lys Ala Gln Ala Arg  
1 5 10 15

Glu Glu Lys His Gln Lys Gln Leu Glu  
20 25

<210> 7  
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<212> PRT  
<213> Homo sapiens

<400> 7

Gln Gln Met Lys Ala Gln Ala Arg Glu Glu Lys His Gln Lys Gln Leu  
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Glu Arg Gln



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<210> 8  
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<210> 9  
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Tyr Glu Glu Lys Thr Lys Lys Ala Glu Arg Glu Leu Ser Glu Gln Ile  
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Gln Arg Ala Leu Gln Leu Glu Glu Glu Arg Lys Arg Ala Gln Glu Glu  
 20 25 30

Ala Glu Arg Leu Glu Ala Asp Arg Met Ala Ala Leu Arg Ala Lys Glu  
 35 40 45

Glu Leu Glu Arg Gln Ala Val Asp Gln Ile Lys Ser Gln Glu Gln Leu  
 50 55 60

Ala Ala Glu  
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Glu Glu Lys Thr Lys Lys Ala Glu Arg Glu Leu  
 1 5 10

<210> 11  
 <211> 68  
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<400> 11

Glu Lys Thr Lys Lys Ala Glu Arg Glu Leu Ser Glu Gln Ile Gln Arg  
 1 5 10 15

Ala Leu Gln Leu Glu Glu Glu Arg Lys Arg Ala Gln Glu Glu Ala Glu  
 20 25 30

Arg Leu Glu Ala Asp Arg Met Ala Ala Leu Arg Ala Lys Glu Glu Leu  
 35 40 45

LMU080901PEP ST25.txt

Glu Arg Gln Ala Val Asp Gln Ile Lys Ser Gln Glu Gln Leu Ala Ala  
50 55 60

Glu Leu Ala Glu  
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<400> 12

Leu Arg Ala Lys Glu Glu Leu Glu Arg Gln Ala Val Asp Gln Ile Lys  
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Ser Gln Glu Gln Leu Ala Ala Glu Leu Ala Glu Tyr Thr Ala Lys Ile  
20 25 30

Ala Leu Leu Glu  
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<400> 13

Leu Arg Ala Lys Glu Glu Leu Glu Arg Gln Ala Val Asp Gln Ile Lys  
1 5 10 15

Ser Gln Glu Gln Leu Ala Ala Glu Leu Ala Glu Tyr Thr Ala Lys Ile  
20 25 30

Ala Leu Leu Glu Glu Ala Arg Arg Arg Lys Glu Asp Glu Val Glu Glu  
35 40 45

Trp Gln His Arg Ala Lys Glu Ala Gln Asp Asp Leu Val Lys Thr Lys  
50 55 60

Glu Glu Leu His Leu Val  
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<400> 14

Glu Glu Leu Glu Arg Gln Ala Val Asp Gln Ile Lys Ser Gln Glu Gln  
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Leu

LMU080901PEP ST25.txt

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Glu Glu Leu Glu Arg Gln Ala Val Asp Gln Ile Lys Ser Gln Glu Gln  
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Leu Ala Ala Glu  
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<210> 16  
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 <212> PRT  
 <213> Homo sapiens

<400> 16

Glu Glu Leu Glu Arg Gln Ala Val Asp Gln Ile Lys Ser Gln Glu Gln  
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Leu Ala Ala Glu Leu Ala Glu  
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<210> 17  
 <211> 36  
 <212> PRT  
 <213> Homo sapiens

<400> 17

Glu Glu Leu Glu Arg Gln Ala Val Asp Gln Ile Lys Ser Gln Glu Gln  
 1 5 10 15

Leu Ala Ala Glu Leu Ala Glu Tyr Thr Ala Lys Ile Ala Leu Leu Glu  
 20 25 30

Glu Ala Arg Arg  
 35

<210> 18  
 <211> 30  
 <212> PRT  
 <213> Homo sapiens

<400> 18

Leu Glu Arg Gln Ala Val Asp Gln Ile Lys Ser Gln Glu Gln Leu Ala  
 1 5 10 15

Ala Glu Leu Ala Glu Tyr Thr Ala Lys Ile Ala Leu Leu Glu  
 20 25 30

<210> 19

## LMU080901PEP ST25.txt

<211> 27  
 <212> PRT  
 <213> Homo sapiens

<400> 19

Leu Ala Ala Glu Leu Ala Glu Tyr Thr Ala Lys Ile Ala Leu Leu Glu  
 1 5 10 15

Glu Ala Arg Arg Arg Lys Glu Asp Glu Val Glu  
 20 25

<210> 20  
 <211> 18  
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<400> 20

Glu Tyr Thr Ala Lys Ile Ala Leu Leu Glu Glu Ala Arg Arg Arg Lys  
 1 5 10 15

Glu Asp

<210> 21  
 <211> 25  
 <212> PRT  
 <213> Homo sapiens

<400> 21

Arg Lys Pro Asp Thr Ile Glu Val Gln Gln Met Lys Ala Gln Ala Arg  
 1 5 10 15

Glu Glu Lys His Gln Lys Gln Leu Glu  
 20 25

<210> 22  
 <211> 18  
 <212> PRT  
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<400> 22

Glu Tyr Thr Ala Lys Ile Ala Leu Leu Glu Glu Ala Arg Arg Arg Lys  
 1 5 10 15

Glu Asp

<210> 23  
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<400> 23

Thr Thr Met Asp Ala Glu Leu Glu Phe  
 1 5

<210> 24  
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<400> 24

Asp Arg Met Ala Ala Leu Arg Ala Lys Glu Glu Leu Glu Arg Gln  
 1 5 10 15

<210> 25  
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Arg Ala Lys Glu Glu Leu Glu Arg Gln Ala Val Asp Gln  
 1 5 10

<210> 26  
 <211> 18  
 <212> PRT  
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Ser Ala Glu Leu Ser Ser Glu Gly Ile Arg Asp Asp Arg Asn Glu Glu  
 1 5 10 15

Lys Arg

<210> 27  
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<400> 27

Lys Thr Lys Glu Glu Leu His  
 1 5

<210> 28  
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<400> 28

Asn Ile Tyr Glu Lys Asp Asp Lys Leu Thr Pro Lys Ile Gly Phe Pro  
 1 5 10 15

Trp Ser

<210> 29  
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<400> 29

Lys Pro Ile Asn Val Arg Val Thr Thr Met Asp Ala Glu Leu Glu  
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<210> 30

<211> 18

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Asn Ile Tyr Glu Lys Asp Asp Lys Leu Thr Pro Lys Ile Gly Phe Pro  
1 5 10 15

Trp Ser

<210> 31

<211> 25

<212> PRT

<213> Homo sapiens

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Leu Arg Ala Lys Glu Glu Leu Glu Arg Gln Ala Val Asp Gln Ile Lys  
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Ser Gln Glu Gln Leu Ala Ala Glu Leu  
20 25

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<213> Homo sapiens

<400> 32

Ser Gln Glu Gln Leu Ala Ala Glu Leu Ala Glu  
1 5 10

<210> 33

<211> 13

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<213> Homo sapiens

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Gln Ala Arg Glu Glu Lys His Gln Lys Gln Leu Glu Arg  
1 5 10

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<211> 64

<212> PRT

<213> Homo sapiens

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Lys Glu Glu Leu Glu Arg Gln Ala Val Asp Gln Ile Lys Ser Gln Glu

1 5 15  
Gln Leu Ala Ala Glu Leu Ala Glu Tyr Thr Ala Lys Ile Ala Leu Leu  
20 25 30

Glu Glu Ala Arg Arg Arg Lys Glu Asp Glu Val Glu Glu Trp Gln His  
35 40 45

Arg Ala Lys Glu Ala Gln Asp Asp Leu Val Lys Thr Lys Glu Glu Leu  
50 55 60

<210> 35  
<211> 18  
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<400> 35

Trp Gln His Arg Ala Lys Glu Ala Gln Asp Asp Leu Val Lys Thr Lys  
1 5 10 15

Glu Glu

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<400> 36

Arg Ala Lys Glu Glu Leu Glu Arg Gln Ala Val Asp Gln  
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<210> 37  
<211> 8  
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<400> 37

Gln Leu Ala Ala Glu Leu Ala Glu  
1 5

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Gln Glu Gln Leu Ala Ala Glu Leu Ala Glu  
1 5 10

<210> 39  
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Arg Ala Lys Glu Glu Leu Glu Arg Gln Ala Val Asp  
1 5 10

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Met Ala Ala Leu Arg Ala Lys Glu Glu Leu  
1 5 10

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<211> 11

<212> PRT

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Ile Ala Gln Asp Leu Glu Met Tyr Gly Ile Asn  
1 5 10

<210> 42

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<213> Homo sapiens

<400> 42

Gln Glu Val Arg Lys Glu Asn Pro Leu  
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<210> 43

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Glu Thr Ala Val Leu Leu Gly Ser Tyr Ala Val Gln Ala Lys Phe Gly  
1 5 10 15

Asp Tyr Asn Lys Glu  
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<213> Homo sapiens

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Glu Ala Gln Asp Asp Leu Val Lys Thr Lys Glu  
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<210> 45

<211> 6

<212> PRT



&lt;213&gt; Homo sapiens

&lt;400&gt; 45

Lys Leu Phe Phe Leu Gln  
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&lt;210&gt; 46

&lt;211&gt; 16

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 46

Arg Arg Lys Glu Asp Glu Val Glu Glu Trp Gln His Arg Ala Lys Glu  
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&lt;210&gt; 47

&lt;211&gt; 16

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 47

Ile Ala Leu Leu Glu Glu Ala Arg Arg Arg Lys Glu Asp Glu Val Glu  
1 5 10 15

&lt;210&gt; 48

&lt;211&gt; 7

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 48

Lys Gly Phe Pro Thr Trp Leu  
1 5

&lt;210&gt; 49

&lt;211&gt; 14

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 49

Gln Leu Phe Asp Gln Val Val Lys Thr Ile Gly Leu Arg Glu  
1 5 10

&lt;210&gt; 50

&lt;211&gt; 8

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&lt;400&gt; 50

Glu Glu Leu Ile Gln Asp Ile Thr  
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&lt;210&gt; 51

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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Asp Gln Ile Lys Ser Gln Glu Gln Leu Ala Ala Glu Leu Ala Glu Tyr  
1 5 10 15

Thr Ala Lys

<210> 52

<211> 7

<212> PRT

<213> Homo sapiens

<400> 52

Asp Lys Tyr Lys Thr Leu Arg  
1 5

<210> 53

<211> 6

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<400> 53

Trp Tyr Phe Gly Leu His  
1 5

<210> 54

<211> 14

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<213> Homo sapiens

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Val Leu Leu Gly Ser Tyr Ala Val Gln Ala Lys Phe Gly Asp  
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<210> 55

<211> 14

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Glu Lys Asp Asp Lys Leu Thr Pro Lys Ile Gly Phe Pro Trp  
1 5 10

<210> 56

<211> 11

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<213> Homo sapiens

<400> 56

Trp Leu Lys Leu Asp Lys Lys Val Ser Ala Gln  
1 5 10

<210> 57

<211> 15

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<213> Homo sapiens

<400> 57

Asp Asn Ala Met Leu Glu Tyr Leu Lys Ile Ala Gln Asp Leu Glu  
1 5 10 15

<210> 58

<211> 36

<212> PRT

<213> Homo sapiens

<400> 58

Ile Ala Leu Leu Glu Glu Ala Arg Arg Arg Lys Glu Asp Glu Val Glu  
1 5 10 15

Glu Trp Gln His Arg Ala Lys Glu Ala Gln Asp Asp Leu Val Lys Thr  
20 25 30

Lys Glu Glu Leu  
35

<210> 59

<211> 15

<212> PRT

<213> Homo sapiens

<400> 59

Asp Asn Ala Met Leu Glu Tyr Leu Lys Ile Ala Gln Asp Leu Glu  
1 5 10 15

<210> 60

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<212> PRT

<213> Homo sapiens

<400> 60

Lys Glu Ala Gln Asp Asp Leu  
1 5

<210> 61

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<400> 61

Glu Asp Val Ala Glu Glu Leu Ile Gln  
1 5

<210> 62

<211> 19

<212> PRT

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<400> 62

Lys Leu Asp Lys Lys Val Ser Ala Gln Glu Val Arg Lys Glu Asn Pro

1

5

15

Leu Gln Phe

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Asp Lys Tyr Lys Thr Leu Arg  
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Glu Gly Ile Leu Ser Asp Glu Ile Tyr  
1 5

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Ile Ala Gln Asp Leu Glu Met Tyr Gly Ile Asn  
1 5 10

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<400> 66

Gly Thr Asp Leu Trp Leu Gly  
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Arg Thr His Asn Asp Ile Ile  
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<210> 68  
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LMU080901PEP ST25.txt

Ala Glu Glu Leu Ile Gln Asp Ile Thr Gln Lys Leu Phe Phe Leu Gln  
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Val Lys Glu Gly Ile Leu Ser Asp Glu Ile Tyr  
20 25

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<400> 69

Glu Arg Glu Leu Ser Glu Gln  
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<210> 70  
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<400> 70

Pro Ile Asp Lys Lys Ala Pro Asp Phe  
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<210> 71  
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<400> 71

Ile Leu Ser Asp Glu Ile Tyr  
1 5

<210> 72  
<211> 28  
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<400> 72

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

Lys Phe Tyr Pro Glu Asp Val Ala Glu Glu Leu Ile  
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<400> 73

Lys Val Ser Ala Gln Glu Val Arg Lys  
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<400> 74

Ala Glu Leu Ala Glu Tyr  
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Gly Thr Asp Leu Trp Leu Gly  
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Thr Lys Lys Ala Glu Arg Glu Leu  
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<210> 77  
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<400> 77

Pro Glu Asp Val Ala Glu Glu Leu Ile Gln Asp Ile  
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<210> 78  
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<400> 78

Val ser Tyr His Val Gln Glu  
 1 5

<210> 79  
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<400> 79

Pro Asn Thr Thr Gly Lys Gln Leu Phe Asp  
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<400> 80

Gln Arg Val Met Asp Gln  
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<400> 81

His Asn Glu Asn Met Arg Gln  
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<400> 82

Lys Val Ser Ala Gln Glu Val Arg Lys Glu Asn Pro  
1 5 10

<210> 83  
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<400> 83

Asp Val Ala Glu Glu Leu Ile Gln Asp Ile Thr  
1 5 10

<210> 84  
<211> 18  
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<400> 84

His Phe Glu Asn Val Lys Asp Ile Pro Phe Gly Phe Gln Thr Val Thr  
1 5 10 15

Ser Asp

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<211> 52  
<212> PRT  
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<400> 85

Lys Ser Leu Asn Leu Ser Thr Glu Phe Ile Ser Ser Thr Lys Arg Pro  
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LMU080901PEP ST25.txt

Tyr Ala Lys Glu Leu Glu Thr Val Asp Phe Lys Asp Lys Leu Glu Glu  
20 25 30

Thr Lys Gly Gln Ile Asn Asn Ser Ile Lys Asp Leu Thr Asp Gly His  
35 40 45

Phe Glu Asn Ile  
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<210> 86  
<211> 14  
<212> PRT  
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<400> 86

Ala Lys Glu Leu Glu Thr Val Asp Phe Lys Asp Lys Leu Glu  
1 5 10

<210> 87  
<211> 22  
<212> PRT  
<213> Homo sapiens

<400> 87

Glu Thr Val Asp Phe Lys Asp Lys Leu Glu Glu Thr Lys Gly Gln Ile  
1 5 10 15

Asn Asn Ser Ile Lys Asp  
20

<210> 88  
<211> 18  
<212> PRT  
<213> Homo sapiens

<400> 88

Val Asp Phe Lys Asp Lys Leu Glu Glu Thr Lys Gly Gln Ile Asn Asn  
1 5 10 15

Ser Ile

<210> 89  
<211> 41  
<212> PRT  
<213> Homo sapiens

<400> 89

Phe Lys Asp Lys Leu Glu Glu Thr Lys Gly Gln Ile Asn Asn Ser Ile  
1 5 10 15

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



LMU080901PEP ST25.txt  
 Val Asn Asp Gln Thr Lys Ile Leu Val  
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Asp Lys Leu Glu Glu Thr Lys Gly Gln Ile Asn Asn Ser Ile Lys  
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<210> 91  
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Asp Lys Leu Glu Glu Thr Lys Gly Gln Ile Asn Asn Ser Ile Lys Asp  
 1                  5                  10                  15

Leu

<210> 92  
 <211> 15  
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 <213> Homo sapiens  
 <400> 92

Leu Glu Glu Thr Lys Gly Gln Ile Asn Asn Ser Ile Lys Asp Leu  
 1                  5                  10                  15

<210> 93  
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 <212> PRT  
 <213> Homo sapiens  
 <400> 93

Asp Gln Thr Lys Ile Leu Val Val Asn Ala Ala  
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<210> 94  
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 <213> Homo sapiens  
 <400> 94

Met Met Asn Met Glu Ala Thr Phe  
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<210> 95  
 <211> 39  
 <212> PRT  
 <213> Homo sapiens

<400> 95

Lys Ile Ile Glu Leu Pro Phe Gln Asn Lys His Leu Ser Met Phe Ile  
1 5 10 15

Leu Leu Pro Lys Asp Val Glu Asp Glu Ser Thr Gly Leu Glu Lys Ile  
20 25 30

Glu Lys Gln Leu Asn Ser Glu  
35

<210> 96

<211> 49

<212> PRT

<213> Homo sapiens

<400> 96

Lys Ile Ile Glu Leu Pro Phe Gln Asn Lys His Leu Ser Met Phe Ile  
1 5 10 15

Leu Leu Pro Lys Asp Val Glu Asp Glu Ser Thr Gly Leu Glu Lys Ile  
20 25 30

Glu Lys Gln Leu Asn Ser Glu Ser Gln Trp Thr Asn Pro Ser Thr Met  
35 40 45

Ala

<210> 97

<211> 21

<212> PRT

<213> Homo sapiens

<400> 97

Lys Asp Val Glu Asp Glu Ser Thr Gly Leu Glu Lys Ile Glu Lys Gln  
1 5 10 15

Leu Asn Ser Glu Ser  
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<210> 98

<211> 31

<212> PRT

<213> Homo sapiens

<400> 98

Lys Asp Val Glu Asp Glu Ser Thr Gly Leu Glu Lys Ile Glu Lys Gln  
1 5 10 15

Leu Asn Ser Glu Ser Leu Ser Gln Trp Thr Asn Pro Ser Thr Met  
20 25 30

<210> 99

<211> 15  
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 <213> Homo sapiens

<400> 99

Glu Asn Leu Gly Leu Lys His Ile Phe Ser Glu Asp Thr Ser Asp  
 1 5 10 15

<210> 100  
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 <212> PRT  
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<400> 100

Lys Val Cys Leu Glu Ile Thr Glu Asp Gly  
 1 5 10

<210> 101  
 <211> 11  
 <212> PRT  
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<400> 101

Glu Leu Asn Ala Asp His Pro Phe Ile Tyr Ile  
 1 5 10

<210> 102  
 <211> 11  
 <212> PRT  
 <213> Homo sapiens

<400> 102

Ile Arg His Asn Lys Thr Arg Asn Ile Ile Phe  
 1 5 10

<210> 103  
 <211> 51  
 <212> PRT  
 <213> Homo sapiens

<400> 103

Lys Ile Ile Glu Leu Pro Phe Gln Asn Lys His Leu Ser Met Phe Ile  
 1 5 10 15

Leu Leu Pro Lys Asp Val Glu Asp Glu Ser Thr Gly Leu Glu Lys Ile  
 20 25 30

Glu Lys Gln Leu Asn Ser Glu Ser Leu Ser Gln Trp Thr Asn Pro Ser  
 35 40 45

Thr Met Ala  
 50

<210> 104  
 <211> 15

<212> PRT  
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<400> 104

Asp Lys Leu Glu Glu Thr Lys Gly Gln Ile Asn Asn Ser Ile Lys  
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<210> 105  
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<212> PRT  
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<400> 105

Met Met Asn Met Glu Ala Thr Phe  
1 5

<210> 106  
<211> 41  
<212> PRT  
<213> Homo sapiens

<400> 106

Phe Lys Asp Lys Leu Glu Glu Thr Lys Gly Gln Ile Asn Asn Ser Ile  
1 5 10 15

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

Val Asn Asp Gln Thr Lys Ile Leu Val  
35 40

<210> 107  
<211> 52  
<212> PRT  
<213> Homo sapiens

<400> 107

Lys Ser Leu Asn Leu Ser Thr Glu Phe Ile Ser Ser Thr Lys Arg Pro  
1 5 10 15

Tyr Ala Lys Glu Leu Glu Thr Val Asp Phe Lys Asp Lys Leu Glu Glu  
20 25 30

Thr Lys Gly Gln Ile Asn Asn Ser Ile Lys Asp Leu Thr Asp Gly His  
35 40 45

Phe Glu Asn Ile  
50

<210> 108  
<211> 15  
<212> PRT  
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<400> 108

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Glu Asn Leu Gly Leu Lys His Ile Phe Ser Glu Asp Thr Ser Asp  
1 5 10 15

<210> 109  
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<212> PRT  
<213> Homo sapiens

<400> 109

Ala Lys Glu Leu Glu Thr Val Asp Phe Lys Asp Lys Leu Glu  
1 5 10

<210> 110  
<211> 10  
<212> PRT  
<213> Homo sapiens

<400> 110

Lys Val Cys Leu Glu Ile Thr Glu Asp Gly  
1 5 10

<210> 111  
<211> 11  
<212> PRT  
<213> Homo sapiens

<400> 111

Asp Gln Thr Lys Ile Leu Val Val Asn Ala Ala  
1 5 10

<210> 112  
<211> 22  
<212> PRT  
<213> Homo sapiens

<400> 112

Glu Thr Val Asp Phe Lys Asp Lys Leu Glu Glu Thr Lys Gly Gln Ile  
1 5 10 15

Asn Asn Ser Ile Lys Asp  
20

<210> 113  
<211> 11  
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<400> 113

Glu Leu Asn Ala Asp His Pro Phe Ile Tyr Ile  
1 5 10

<210> 114  
<211> 12  
<212> PRT  
<213> Homo sapiens

<400> 114

Glu Leu Asn Ala Asp His Pro Phe Ile Tyr Ile Ile  
1 5 10

<210> 115

<211> 9

<212> PRT

<213> Homo sapiens

<400> 115

Leu Pro Phe Gln Asn Lys His Leu Ser  
1 5

<210> 116

<211> 16

<212> PRT

<213> Homo sapiens

<400> 116

Glu Thr Lys Gly Gln Ile Asn Asn Ser Ile Lys Asp Leu Thr Asp Gly  
1 5 10 15

<210> 117

<211> 9

<212> PRT

<213> Homo sapiens

<400> 117

Glu Pro Leu Gly Asn Val Leu Phe Ser  
1 5

<210> 118

<211> 10

<212> PRT

<213> Homo sapiens

<400> 118

His Phe Glu Asn Val Lys Asp Ile Pro Phe  
1 5 10

<210> 119

<211> 9

<212> PRT

<213> Homo sapiens

<400> 119

Met Asp Ala Leu Gln Leu Ala Asn Ser  
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<210> 120

<211> 11

<212> PRT

<213> Homo sapiens

<400> 120

LMU080901PEP ST25.txt

Phe Ile Leu Leu Pro Lys Asp Val Glu Asp Glu  
1 5 10

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<400> 121

Ile Leu Val Val Asn Ala Ala Tyr Phe Val Gly Lys Trp Met Lys Lys  
1 5 10 15

Phe Pro Glu Ser Glu  
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<210> 122  
<211> 6  
<212> PRT  
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<400> 122

Asp Leu Phe Lys Gln Leu  
1 5

<210> 123  
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<212> PRT  
<213> Homo sapiens

<400> 123

Trp Thr Asn Pro Ser Thr Met Ala  
1 5

<210> 124  
<211> 16  
<212> PRT  
<213> Homo sapiens

<400> 124

Lys Leu Glu Glu Thr Lys Gly Gln Ile Asn Asn Ser Ile Lys Asp Leu  
1 5 10 15

<210> 125  
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<212> PRT  
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<400> 125

Ala Leu Gln Leu Ala Asn Ser Ala Phe  
1 5

<210> 126  
<211> 11  
<212> PRT  
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<400> 126

Asn Ser Ala Phe Ala Val Asp Leu Phe Lys Gln  
1 5 10

<210> 127

<211> 17

<212> PRT

<213> Homo sapiens

<400> 127

Leu Gly Asn Val Leu Phe Ser Pro Ile Cys Leu Ser Thr Ser Leu Ser  
1 5 10 15

Leu

<210> 128

<211> 23

<212> PRT

<213> Homo sapiens

<400> 128

Met Ser Glu Thr Lys Gly Val Ala Leu Ser Asn Val Ile His Lys Val  
1 5 10 15

Cys Leu Glu Ile Thr Glu Asp  
20

<210> 129

<211> 6

<212> PRT

<213> Homo sapiens

<400> 129

Glu Asn Ile Leu Ala Asp  
1 5

<210> 130

<211> 11

<212> PRT

<213> Homo sapiens

<400> 130

Lys Phe Lys Val Glu Lys Met Ile Asp Pro Lys  
1 5 10

<210> 131

<211> 29

<212> PRT

<213> Homo sapiens

<400> 131

Val Pro Gly Ala Arg Ile Leu Gln His Lys Asp Glu Leu Asn Ala Asp  
1 5 10 15



His Pro Phe Ile Tyr Ile Ile Arg His Asn Lys Thr Arg  
20 25

<210> 132  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 132

Arg Asn Ile Ile Phe Phe Gly Lys Phe  
1 5

<210> 133  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 133

Asp Ala Leu Gln Leu Ala Asn Ser Ala  
1 5

<210> 134  
<211> 7  
<212> PRT  
<213> Homo sapiens

<400> 134

Asp Phe Lys Asp Lys Leu Glu  
1 5

<210> 135  
<211> 8  
<212> PRT  
<213> Homo sapiens

<400> 135

Gly Gln Ile Asn Asn Ser Ile Lys  
1 5

<210> 136  
<211> 7  
<212> PRT  
<213> Homo sapiens

<400> 136

Phe Ile Tyr Ile Ile Arg His  
1 5

<210> 137  
<211> 7  
<212> PRT  
<213> Homo sapiens

<400> 137

Leu Ser Met Phe Ile Leu Leu  
1 5

<210> 138  
<211> 16  
<212> PRT  
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<400> 138

Glu Ile Gly Gln Val Leu His Phe Glu Asn Val Lys Asp Ile Pro Phe  
1 5 10 15

<210> 139  
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<213> Homo sapiens  
<400> 139

Gly Asp Ser Ile Glu Val  
1 5

<210> 140  
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Val Asp Lys Ser Leu Asn Leu Ser  
1 5

<210> 141  
<211> 11  
<212> PRT  
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<400> 141

Phe Glu Asn Val Lys Asp Ile Pro Phe Gly Phe  
1 5 10

<210> 142  
<211> 10  
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<400> 142

Leu Glu Lys Ile Glu Lys Gln Leu Asn Ser  
1 5 10

<210> 143  
<211> 7  
<212> PRT  
<213> Homo sapiens  
<400> 143

Ile Leu Val Val Asn Ala Ala  
1 5

LMU080901PEP ST25.txt

<210> 144  
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 <212> PRT  
 <213> Homo sapiens

<400> 144

Leu Ser Met Phe Ile Leu Leu  
 1 5

<210> 145  
 <211> 181  
 <212> PRT  
 <213> Homo sapiens

<400> 145

Ile Gly Lys Pro Ala Pro Asp Phe Lys Ala Thr Ala Val Val Asp Gly  
 1 5 10 15

Ala Phe Lys Glu Val Lys Leu Ser Asp Tyr Lys Gly Lys Tyr Val Val  
 20 25 30

Leu Phe Phe Tyr Pro Leu Asp Phe Thr Phe Val Cys Pro Thr Glu Ile  
 35 40 45

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

Val Leu Gly Val Ser Val Asp Ser Gln Phe Thr His Leu Ala Trp Ile  
 65 70 75 80

Asn Thr Pro Arg Lys Glu Gly Gly Leu Gly Pro Leu Asn Ile Pro Leu  
 85 90 95

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

Thr Asp Glu Gly Ile Ala Tyr Arg Gly Leu Phe Ile Ile Asp Gly Lys  
 115 120 125

Gly Val Leu Arg Gln Ile Thr Val Asn Asp Leu Pro Val Gly Arg Ser  
 130 135 140

Val Asp Glu Ala Leu Arg Leu Val Gln Ala Phe Gln Tyr Thr Asp Glu  
 145 150 155 160

His Gly Glu Val Cys Pro Ala Gly Trp Lys Pro Gly Ser Asp Thr Ile  
 165 170 175

Lys Pro Asn Val Asp  
 180

LMU080901PEP ST25.txt

<210> 146  
 <211> 18  
 <212> PRT  
 <213> Homo sapiens

<400> 146

Ala Phe Lys Glu Val Lys Leu Ser Asp Tyr Lys Gly Lys Tyr Val Val  
 1 5 10 15

Leu Phe

<210> 147  
 <211> 8  
 <212> PRT  
 <213> Homo sapiens

<400> 147

Glu Val Lys Leu Ser Asp Tyr Lys  
 1 5

<210> 148  
 <211> 13  
 <212> PRT  
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<400> 148

Glu Val Lys Leu Ser Asp Tyr Lys Gly Lys Tyr Val Val  
 1 5 10

<210> 149  
 <211> 14  
 <212> PRT  
 <213> Homo sapiens

<400> 149

Glu Val Lys Leu Ser Asp Tyr Lys Gly Lys Tyr Val Val Leu  
 1 5 10

<210> 150  
 <211> 12  
 <212> PRT  
 <213> Homo sapiens

<400> 150

Tyr Val Val Leu Phe Phe Tyr Pro Leu Asp Phe Thr  
 1 5 10

<210> 151  
 <211> 9  
 <212> PRT  
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<400> 151

Leu Phe Phe Tyr Pro Leu Asp Phe Thr  
 1 5

<210> 152  
 <211> 10  
 <212> PRT  
 <213> Homo sapiens

<400> 152

Phe Ser Asn Arg Ala Glu Asp Phe Arg Lys  
 1 5 10

<210> 153  
 <211> 7  
 <212> PRT  
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<400> 153

Leu Asn Ile Pro Leu Leu Ala  
 1 5

<210> 154  
 <211> 18  
 <212> PRT  
 <213> Homo sapiens

<400> 154

Val Thr Arg Arg Leu Ser Glu Asp Tyr Gly Val Leu Lys Thr Asp Glu  
 1 5 10 15

Gly Ile

<210> 155  
 <211> 16  
 <212> PRT  
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<400> 155

Arg Arg Leu Ser Glu Asp Tyr Gly Val Leu Lys Thr Asp Glu Gly Ile  
 1 5 10 15

<210> 156  
 <211> 46  
 <212> PRT  
 <213> Homo sapiens

<400> 156

Leu Lys Thr Asp Glu Gly Ile Ala Tyr Arg Gly Leu Phe Ile Ile Asp  
 1 5 10 15

Gly Lys Gly Val Leu Arg Gln Ile Thr Val Asn Asp Leu Pro Val Gly  
 20 25 30

Arg Ser Val Asp Glu Ala Leu Arg Leu Val Gln Ala Phe Gln  
 35 40 45

<210> 157  
 <211> 17  
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<400> 157

Gly Ile Ala Tyr Arg Gly Leu Phe Ile Ile Asp Gly Lys Gly Val Leu  
 1 5 10 15

Arg

<210> 158  
 <211> 11  
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<400> 158

Ile Ile Asp Gly Lys Gly Val Leu Arg Gln Ile  
 1 5 10

<210> 159  
 <211> 12  
 <212> PRT  
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<400> 159

Val Gly Arg Ser Val Asp Glu Ala Leu Arg Leu Val  
 1 5 10

<210> 160  
 <211> 7  
 <212> PRT  
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<400> 160

Glu Ala Leu Arg Leu Val Gln  
 1 5

<210> 161  
 <211> 11  
 <212> PRT  
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<400> 161

Asn Val Asp Asp Ser Lys Glu Tyr Phe Ser Lys  
 1 5 10

<210> 162  
 <211> 8  
 <212> PRT  
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<400> 162

Lys Glu Tyr Phe Ser Lys His Asn

1

5

<210> 163  
 <211> 181  
 <212> PRT  
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<400> 163

Ile Gly Lys Pro Ala Pro Asp Phe Lys Ala Thr Ala Val Val Asp Gly  
 1 5 10 15

Ala Phe Lys Glu Val Lys Leu Ser Asp Tyr Lys Gly Lys Tyr Val Val  
 20 25 30

Leu Phe Phe Tyr Pro Leu Asp Phe Thr Phe Val Cys Pro Thr Glu Ile  
 35 40 45

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

Val Leu Gly Val Ser Val Asp Ser Gln Phe Thr His Leu Ala Trp Ile  
 65 70 75 80

Asn Thr Pro Arg Lys Glu Gly Gly Leu Gly Pro Leu Asn Ile Pro Leu  
 85 90 95

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

Thr Asp Glu Gly Ile Ala Tyr Arg Gly Leu Phe Ile Ile Asp Gly Lys  
 115 120 125

Gly Val Leu Arg Gln Ile Thr Val Asn Asp Leu Pro Val Gly Arg Ser  
 130 135 140

Val Asp Glu Ala Leu Arg Leu Val Gln Ala Phe Gln Tyr Thr Asp Glu  
 145 150 155 160

His Gly Glu Val Cys Pro Ala Gly Trp Lys Pro Gly Ser Asp Thr Ile  
 165 170 175

Lys Pro Asn Val Asp  
 180

<210> 164  
 <211> 18  
 <212> PRT  
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<400> 164

Ala Phe Lys Glu Val Lys Leu Ser Asp Tyr Lys Gly Lys Tyr Val Val  
 1 5 10 15

Leu Phe

<210> 165  
 <211> 14  
 <212> PRT  
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 <400> 165

Glu Val Lys Leu Ser Asp Tyr Lys Gly Lys Tyr Val Val Leu  
 1 5 10

<210> 166  
 <211> 8  
 <212> PRT  
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 <400> 166

Glu Val Lys Leu Ser Asp Tyr Lys  
 1 5

<210> 167  
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 <213> Homo sapiens  
 <400> 167

Glu Val Lys Leu Ser Asp Tyr Lys  
 1 5

<210> 168  
 <211> 7  
 <212> PRT  
 <213> Homo sapiens  
 <400> 168

Glu Ala Leu Arg Leu Val Gln  
 1 5

<210> 169  
 <211> 17  
 <212> PRT  
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Gly Ile Ala Tyr Arg Gly Leu Phe Ile Ile Asp Gly Lys Gly Val Leu  
 1 5 10 15

Arg

<210> 170  
 <211> 13  
 <212> PRT  
 <213> Homo sapiens



<400> 170

Glu Val Lys Leu Ser Asp Tyr Lys Gly Lys Tyr Val Val  
1 5 10

<210> 171

<211> 10

<212> PRT

<213> Homo sapiens

<400> 171

Phe Ser Asn Arg Ala Glu Asp Phe Arg Lys  
1 5 10

<210> 172

<211> 46

<212> PRT

<213> Homo sapiens

<400> 172

Leu Lys Thr Asp Glu Gly Ile Ala Tyr Arg Gly Leu Phe Ile Ile Asp  
1 5 10 15

Gly Lys Gly Val Leu Arg Gln Ile Thr Val Asn Asp Leu Pro Val Gly  
20 25 30

Arg Ser Val Asp Glu Ala Leu Arg Leu Val Gln Ala Phe Gln  
35 40 45

<210> 173

<211> 11

<212> PRT

<213> Homo sapiens

<400> 173

Ile Ile Asp Gly Lys Gly Val Leu Arg Gln Ile  
1 5 10

<210> 174

<211> 12

<212> PRT

<213> Homo sapiens

<400> 174

Tyr Val Val Leu Phe Phe Tyr Pro Leu Asp Phe Thr  
1 5 10

<210> 175

<211> 11

<212> PRT

<213> Homo sapiens

<400> 175

Arg Gln Ile Thr Val Asn Asp Leu Pro Val Gly  
1 5 10

<210> 176  
 <211> 10  
 <212> PRT  
 <213> Homo sapiens

<400> 176

Arg Gln Ile Thr Val Asn Asp Leu Pro Val  
 1 5 10

<210> 177  
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Ser Ser Ser Glu Ile His  
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Gln Leu Ser Ser Gly Val Ser Glu Ile Arg His  
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Tyr Phe Tyr Ser Asn Ile Asp Ser Cys Asp Ile Lys  
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Asn Ile Asp Ser  
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<400> 325

Phe Cys Met Gly Asn Ile Asp Ser Ile Asn Cys Lys  
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