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SEQUENCE LISTING

<110> TEL HASHOMER MEDICAL RESEARCH, INFRASTRUCTURE AND SERVICES LTD.

<120> PEPTIDES AND COMPOSITIONS FOR PREVENTION OF CELL ADHESION AND METHODS OF USING SAME

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<141> 2009-09-23

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<151> 2008-09-24

<160> 62

<170> PatentIn version 3.5

<210> 1  
<211> 6  
<212> PRT  
<213> Unknown

<220>  
<223> Description of Unknown: Aquatic organism or moss sequence

<400> 1  
Tyr Asp Tyr Asn Trp Tyr  
1 5

<210> 2  
<211> 6  
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<213> Unknown

<220>  
<223> Description of Unknown: Aquatic organism or moss sequence

<400> 2  
Tyr Asp Tyr Asn Leu Tyr  
1 5

<210> 3  
<211> 6  
<212> PRT  
<213> Unknown

<220>  
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<400> 3  
Phe Asp Tyr Asn Phe Tyr  
1 5

<210> 4  
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<213> Unknown

<220>

<223> Description of Unknown: Aquatic organism or moss sequence

<400> 4

Phe Asp Tyr Asn Leu Tyr  
1 5

<210> 5

<211> 6

<212> PRT

<213> Unknown

<220>

<223> Description of Unknown: Aquatic organism or moss sequence

<400> 5

Phe Asp Tyr Asn Trp Tyr  
1 5

<210> 6

<211> 6

<212> PRT

<213> Unknown

<220>

<223> Description of Unknown: Aquatic organism or moss sequence

<400> 6

Tyr Asp Trp Asn Leu Tyr  
1 5

<210> 7

<211> 6

<212> PRT

<213> Unknown

<220>

<223> Description of Unknown: Aquatic organism or moss sequence

<400> 7

Tyr Asp Trp His Leu Tyr  
1 5

<210> 8

<211> 6

<212> PRT

<213> Unknown

<220>

<223> Description of Unknown: Aquatic organism or moss sequence

<400> 8

Trp Asp Tyr Asn Leu Tyr  
1 5

<210> 9

<211> 15  
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 <213> Unknown

<220>  
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 sequence

<400> 9  
 Leu Phe Ser Val Pro Tyr Asp Tyr Asn Trp Tyr Ser Asn Trp Trp  
 1 5 10 15

<210> 10  
 <211> 14  
 <212> PRT  
 <213> Unknown

<220>  
 <223> Description of Unknown: Peptide  
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<400> 10  
 Phe Ser Val Pro Tyr Asp Tyr Asn Leu Tyr Ser Asn Trp Trp  
 1 5 10

<210> 11  
 <211> 15  
 <212> PRT  
 <213> Unknown

<220>  
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<400> 11  
 Met Phe Ser Val Pro Phe Asp Tyr Asn Phe Tyr Ser Asn Trp Trp  
 1 5 10 15

<210> 12  
 <211> 15  
 <212> PRT  
 <213> Unknown

<220>  
 <223> Description of Unknown: Peptide  
 sequence

<400> 12  
 Met Phe Ser Val Pro Phe Asp Tyr Asn Leu Tyr Ser Asn Trp Trp  
 1 5 10 15

<210> 13  
 <211> 15  
 <212> PRT  
 <213> Unknown

<220>  
 <223> Description of Unknown: Peptide  
 sequence

<400> 13  
 Met Phe Ser Val Pro Phe Asp Tyr Asn Leu Tyr Thr Asn Trp Trp  
 1 5 10 15

<210> 14  
 <211> 15  
 <212> PRT  
 <213> Unknown

<220>  
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 sequence

<400> 14  
 Met Trp Ser Val Pro Phe Asp Tyr Asn Leu Tyr Ser Asn Trp Trp  
 1 5 10 15

<210> 15  
 <211> 15  
 <212> PRT  
 <213> Unknown

<220>  
 <223> Description of Unknown: Peptide  
 sequence

<400> 15  
 Met Phe Ser Val Pro Trp Asp Tyr Asn Leu Tyr Lys Asn Trp Phe  
 1 5 10 15

<210> 16  
 <211> 15  
 <212> PRT  
 <213> Unknown

<220>  
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 sequence

<400> 16  
 Met Phe Ser Val Pro Phe Asp Tyr Asn Leu Tyr Lys Asn Trp Leu  
 1 5 10 15

<210> 17  
 <211> 16  
 <212> PRT  
 <213> Unknown

<220>  
 <223> Description of Unknown: Peptide  
 sequence

<400> 17  
 Met Phe Ser Val Pro Phe Phe Asp Tyr Asn Trp Tyr Ser Asn Trp Trp  
 1 5 10 15

<210> 18  
 <211> 15  
 <212> PRT  
 <213> Unknown

<220>  
 <223> Description of Unknown: Peptide  
 sequence

<400> 18  
 Leu Phe Ser Val Pro Phe Asp Tyr Asn Leu Tyr Ser Asn Trp Trp

1 5 15

<210> 19  
<211> 15  
<212> PRT  
<213> Unknown

<220>  
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sequence

<400> 19  
Met Ala Ser Ile Pro Tyr Asp Trp Asn Leu Tyr Gln Ser Trp Ala  
1 5 10 15

<210> 20  
<211> 15  
<212> PRT  
<213> Unknown

<220>  
<223> Description of Unknown: Peptide  
sequence

<400> 20  
Met Ala Ser Ile Pro Tyr Asp Trp Asn Leu Tyr Ser Ala Trp Ala  
1 5 10 15

<210> 21  
<211> 15  
<212> PRT  
<213> Unknown

<220>  
<223> Description of Unknown: Peptide  
sequence

<400> 21  
Met Ala Ser Ile Pro Tyr Asp Trp His Leu Tyr Asn Ala Trp Ala  
1 5 10 15

<210> 22  
<211> 19  
<212> DNA  
<213> Aiptesia pulchella

<400> 22  
gtrtcgacaa cgagtcrgg

19

<210> 23  
<211> 20  
<212> DNA  
<213> Anemonia viridansm

<400> 23  
tgacatycca ccagttgctg

20

<210> 24  
<211> 15  
<212> PRT  
<213> Unknown

&lt;220&gt;

&lt;223&gt; Description of Unknown: EqT-IV sequence

&lt;400&gt; 24

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Phe | Ser | Val | Pro | Tyr | Asp | Tyr | Asn | Trp | Tyr | Ser | Asn | Trp | Trp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |

&lt;210&gt; 25

&lt;211&gt; 14

&lt;212&gt; PRT

&lt;213&gt; Unknown

&lt;220&gt;

&lt;223&gt; Description of Unknown: Actinoporin Or-A sequence

&lt;400&gt; 25

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Ser | Val | Pro | Tyr | Asp | Tyr | Asn | Leu | Tyr | Ser | Asn | Trp | Trp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     |

&lt;210&gt; 26

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Heteractis magnifica

&lt;400&gt; 26

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Phe | Ser | Val | Pro | Phe | Asp | Tyr | Asn | Phe | Tyr | Ser | Asn | Trp | Trp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |

&lt;210&gt; 27

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Unknown

&lt;220&gt;

&lt;223&gt; Description of Unknown: Avt-I RTX-A sequence

&lt;400&gt; 27

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Phe | Ser | Val | Pro | Phe | Asp | Tyr | Asn | Leu | Tyr | Ser | Asn | Trp | Trp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |

&lt;210&gt; 28

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Unknown

&lt;220&gt;

&lt;223&gt; Description of Unknown: Pstx20 sequence

&lt;400&gt; 28

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Phe | Ser | Val | Pro | Phe | Asp | Tyr | Asn | Leu | Tyr | Thr | Asn | Trp | Trp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |

&lt;210&gt; 29

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Physcomitrella patens

&lt;400&gt; 29

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Trp | Ser | Val | Pro | Phe | Asp | Tyr | Asn | Leu | Tyr | Ser | Asn | Trp | Trp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |

&lt;210&gt; 30

<211> 15  
 <212> PRT  
 <213> Danio rerio

<400> 30  
 Met Phe Ser Val Pro Trp Asp Tyr Asn Leu Tyr Lys Asn Trp Phe  
 1 5 10 15

<210> 31  
 <211> 15  
 <212> PRT  
 <213> Tetraodon nigroviridis

<400> 31  
 Met Phe Ser Val Pro Phe Asp Tyr Asn Leu Tyr Lys Asn Trp Leu  
 1 5 10 15

<210> 32  
 <211> 17  
 <212> PRT  
 <213> Unknown

<220>  
 <223> Description of Unknown: Peptide  
 sequence

<400> 32  
 Cys Met Phe Ser Val Pro Phe Asp Tyr Asn Trp Tyr Ser Asn Trp Trp  
 1 5 10 15

Cys

<210> 33  
 <211> 214  
 <212> PRT  
 <213> Actinia equina

<400> 33  
 Met Ser Arg Leu Ile Ile Val Phe Ile Val Val Thr Met Ile Cys Ser  
 1 5 10 15

Ala Thr Ala Leu Pro Ser Lys Lys Ile Ile Asp Glu Asp Glu Glu Asp  
 20 25 30

Glu Lys Arg Ser Ala Asp Val Ala Gly Ala Val Ile Asp Gly Ala Ser  
 35 40 45

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

Lys Arg Lys Ile Ala Val Gly Val Asp Asn Glu Ser Gly Lys Thr Trp  
 65 70 75 80

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

Pro His Lys Val Pro His Gly Lys Ala Leu Leu Tyr Asn Gly Gln Lys

100

105

110

Asp Arg Gly Pro Val Ala Thr Gly Ala Val Gly Val Leu Ala Tyr Leu  
 115 120 125

Met Ser Asp Gly Asn Thr Leu Ala Val Leu Phe Ser Val Pro Tyr Asp  
 130 135 140

Tyr Asn Trp Tyr Ser Asn Trp Trp Asn Val Arg Ile Tyr Lys Gly Lys  
 145 150 155 160

Arg Arg Ala Asp Gln Arg Met Tyr Glu Glu Leu Tyr Tyr Asn Leu Ser  
 165 170 175

Pro Phe Arg Gly Asp Asn Gly Trp His Thr Arg Asn Leu Gly Tyr Gly  
 180 185 190

Leu Lys Ser Arg Gly Phe Met Asn Ser Ser Gly His Ala Ile Leu Glu  
 195 200 205

Ile His Val Ser Lys Ala  
 210

&lt;210&gt; 34

&lt;211&gt; 175

&lt;212&gt; PRT

&lt;213&gt; Stichodactyla helianthus

&lt;400&gt; 34

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

Leu Asp Lys Val Leu Glu Glu Leu Gly Lys Val Ser Arg Lys Ile Ala  
 20 25 30

Val Gly Ile Asp Asn Glu Ser Gly Gly Thr Trp Thr Ala Leu Asn Ala  
 35 40 45

Tyr Phe Arg Ser Gly Thr Thr Asp Val Ile Leu Pro Glu Phe Val Pro  
 50 55 60

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

Ala Thr Gly Ala Val Ala Ala Phe Ala Tyr Tyr Met Ser Ser Gly Asn  
 85 90 95

Thr Leu Gly Val Met Phe Ser Val Pro Phe Asp Tyr Asn Trp Tyr Ser  
 100 105 110

Asn Trp Trp Asp Val Lys Ile Tyr Ser Gly Lys Arg Arg Ala Asp Gln  
 115 120 125

Gly Met Tyr Glu Asp Leu Tyr Tyr Gly Asn Pro Tyr Arg Gly Asp Asn  
 130 135 140

Gly Trp His Glu Lys Asn Leu Gly Tyr Gly Leu Arg Met Lys Gly Ile  
 145 150 155 160

Met Thr Ser Ala Gly Glu Ala Lys Met Gln Ile Lys Ile Ser Arg  
 165 170 175

<210> 35  
 <211> 176  
 <212> PRT  
 <213> Actinia equina

<400> 35  
 Asp Val Ala Gly Ala Val Ile Asp Gly Ala Ser Leu Ser Phe Asp Ile  
 1 5 10 15

Leu Lys Thr Val Leu Glu Ala Leu Gly Asn Val Lys Arg Lys Ile Ala  
 20 25 30

Val Gly Val Asp Asn Glu Ser Gly Lys Thr Trp Thr Ala Leu Asn Thr  
 35 40 45

Tyr Phe Arg Ser Gly Thr Ser Asp Ile Val Leu Pro His Lys Val Pro  
 50 55 60

His Gly Lys Ala Leu Leu Tyr Asn Gly Gln Lys Asp Arg Gly Pro Val  
 65 70 75 80

Ala Thr Gly Ala Val Gly Val Leu Ala Tyr Leu Met Ser Asp Gly Asn  
 85 90 95

Thr Leu Ala Val Leu Phe Ser Val Pro Tyr Asp Tyr Asn Trp Tyr Ser  
 100 105 110

Asn Trp Trp Asn Val Arg Ile Tyr Lys Gly Lys Arg Arg Ala Asp Gln  
 115 120 125

Arg Met Tyr Glu Glu Leu Tyr Tyr Asn Leu Ser Pro Phe Arg Gly Asp  
 130 135 140

Asn Gly Trp His Thr Arg Asn Leu Gly Tyr Gly Leu Lys Ser Arg Gly  
 145 150 155 160

Phe Met Asn Ser Ser Gly His Ala Ile Leu Glu Ile His Val Ser Lys  
 165 170 175

<210> 36  
 <211> 114  
 <212> PRT  
 <213> Danio rerio

&lt;400&gt; 36

Met Thr Glu Ser Ala Glu Ala Val Ala Ala Asn Val Ser Ser Arg Arg  
 1 5 10 15

His Ala Thr Val Glu Ile Thr Asn Leu Thr Asn Asn Tyr Cys Phe Leu  
 20 25 30

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

Pro Thr Val Arg Pro Leu Lys Thr Glu Val Cys Thr Phe Ser Lys Ser  
 50 55 60

Ala Ala His Ala Thr Gly Ala Asn Gly Ser Gly Ile Asn Phe Glu Gly  
 65 70 75 80

Lys Asn Leu Asp Ile Arg Ala Thr Met Cys Pro Met Gly Arg Ala Ile  
 85 90 95

Val Lys Val Glu Val Trp Asp Lys Leu Leu Ser Pro Met Ala Gln Met  
 100 105 110

Asp Cys

&lt;210&gt; 37

&lt;211&gt; 156

&lt;212&gt; PRT

&lt;213&gt; Actinia equina

&lt;400&gt; 37

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

Asn Glu Ser Gly Lys Thr Trp Thr Ala Leu Asn Thr Tyr Phe Arg Ser  
 20 25 30

Gly Thr Ser Asp Ile Val Leu Pro His Lys Val Pro His Gly Lys Ala  
 35 40 45

Leu Leu Tyr Asn Gly Gln Lys Asp Arg Gly Pro Val Ala Thr Gly Ala  
 50 55 60

Val Gly Val Leu Ala Tyr Leu Met Ser Asp Gly Asn Thr Leu Ala Val  
 65 70 75 80

Leu Phe Ser Val Pro Tyr Asp Tyr Asn Trp Tyr Ser Asn Trp Trp Asn  
 85 90 95

Val Arg Ile Tyr Lys Gly Lys Arg Arg Ala Asp Gln Arg Met Tyr Glu  
 100 105 110

Glu Leu Tyr Tyr Asn Leu Ser Pro Phe Arg Gly Asp Asn Gly Trp His  
 Page 10

115

120

125

Thr Arg Asn Leu Gly Tyr Gly Leu Lys Ser Arg Gly Phe Met Asn Ser  
 130 135 140

Ser Gly His Ala Ile Leu Glu Ile His Val Ser Lys  
 145 150 155

&lt;210&gt; 38

&lt;211&gt; 166

&lt;212&gt; PRT

&lt;213&gt; Danio rerio

&lt;400&gt; 38

Val Ala Ala Asn Val Ser Ser Arg Arg His Ala Thr Val Glu Ile Thr  
 1 5 10 15

Asn Leu Thr Asn Asn Tyr Cys Phe Leu Asn Pro Lys Val Tyr Leu Glu  
 20 25 30

Asn Gly Glu Thr Ser Asn Pro Pro Gln Pro Thr Val Arg Pro Leu Lys  
 35 40 45

Thr Glu Val Cys Thr Phe Ser Lys Ser Ala Ala His Ala Thr Gly Ser  
 50 55 60

Val Gly Val Leu Thr Tyr Asp Leu Phe Glu Arg Arg Arg Asn Asp Tyr  
 65 70 75 80

Thr Glu Thr Leu Ala Ile Met Phe Ser Val Pro Trp Asp Tyr Asn Leu  
 85 90 95

Tyr Lys Asn Trp Phe Ala Val Gly Ile Tyr Pro Lys Gly Lys Glu Cys  
 100 105 110

Asp Gln Ala Leu Tyr Lys Glu Met Tyr Tyr Gln Lys Asn Gln His Gly  
 115 120 125

Phe Val Arg Glu Glu Ala Asn Gly Ser Gly Ile Asn Phe Glu Gly Lys  
 130 135 140

Asn Leu Asp Ile Arg Ala Thr Met Cys Pro Met Gly Arg Ala Ile Val  
 145 150 155 160

Lys Val Glu Val Trp Asp  
 165

&lt;210&gt; 39

&lt;211&gt; 181

&lt;212&gt; PRT

&lt;213&gt; Tetraodon nigroviridis

&lt;400&gt; 39

Met Glu Ser Ala Glu Ala Val Ala Ala Asp Val Ser Arg Ser Arg Ser

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

<210> 40  
 <211> 157  
 <212> PRT  
 <213> Actinia equina

<400> 40  
 Leu Glu Ala Leu Gly Asn Val Lys Arg Lys Ile Ala Val Gly Val Asp  
 1                      5                      10                      15  
 Asn Glu Ser Gly Lys Thr Trp Thr Ala Leu Asn Thr Tyr Phe Arg Ser  
                     20                      25                      30  
 Gly Thr Ser Asp Ile Val Leu Pro His Lys Val Pro His Gly Lys Ala  
                     35                      40                      45  
 Leu Leu Tyr Asn Gly Gln Lys Asp Arg Gly Pro Val Ala Thr Gly Ala  
                     50                      55                      60

Val Gly Val Leu Ala Tyr Leu Met Ser Asp Gly Asn Thr Leu Ala Val  
65 70 75 80

Leu Phe Ser Val Pro Tyr Asp Tyr Asn Trp Tyr Ser Asn Trp Trp Asn  
85 90 95

Val Arg Ile Tyr Lys Gly Lys Arg Arg Ala Asp Gln Arg Met Tyr Glu  
100 105 110

Glu Leu Tyr Tyr Asn Leu Ser Pro Phe Arg Gly Asp Asn Gly Trp His  
115 120 125

Thr Arg Asn Leu Gly Tyr Gly Leu Lys Ser Arg Gly Phe Met Asn Ser  
130 135 140

Ser Gly His Ala Ile Leu Glu Ile His Val Ser Lys Ala  
145 150 155

<210> 41

<211> 169

<212> PRT

<213> Tetraodon nigroviridis

<400> 41

Val Ala Ala Asp Val Ser Arg Ser Arg Ser Val Thr Ile Glu Ile Ser  
1 5 10 15

Asn Leu Thr Lys Asn Tyr Cys Leu Ile Asn Pro Arg Val Tyr Leu Glu  
20 25 30

Ser Gly Glu Thr Tyr Asn Pro Pro Gln Pro Thr Val Arg Pro Leu Met  
35 40 45

Thr Glu Val Cys Thr Phe Ser Lys Ser Ser Gly Ile Pro Thr Gly Ser  
50 55 60

Val Gly Val Leu Thr Tyr Glu Leu Leu Glu Arg Arg Ser Thr Met Leu  
65 70 75 80

Pro Glu Thr Leu Ala Ile Met Phe Ser Val Pro Tyr Asp Tyr Ser Phe  
85 90 95

Tyr Asn Asn Trp Phe Ala Val Gly Ile Tyr Glu Thr Gly Thr Lys Cys  
100 105 110

Asn Glu Gly Leu Tyr Lys Gln Met Tyr Asn Glu Lys Lys Gln Ala Glu  
115 120 125

His Gly Phe Val Arg Glu Lys Ala Asn Gly Ser Gly Ile Asn Tyr Val  
130 135 140

Gly Gly Asn Leu Asp Ile Arg Ala Thr Met Asn Pro Leu Gly Lys Ala

145

150

155

160

Ile Met Lys Val Glu Val Trp Asp Ala  
165

&lt;210&gt; 42

&lt;211&gt; 199

&lt;212&gt; PRT

&lt;213&gt; Physcomitrella patens

&lt;400&gt; 42

Met Val Val His Leu Ile Ala Met Gly Leu Arg Tyr Ser Glu Thr Ile  
1 5 10 15

Met Lys Thr Ala Arg Met Ala Glu Ala Ile Ile Pro Ala Ala Glu Leu  
20 25 30

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

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

Asn Leu Gly Val Tyr Phe Asn Ser Gly Ser Ser Asp Arg Ser Ile Ala  
65 70 75 80

Tyr Lys Ile Asn Ala Gln Glu Ala Leu Leu Phe Ser Ala Arg Lys Ser  
85 90 95

Asp His Thr Ala Arg Gly Thr Val Gly Thr Phe Ser Tyr Tyr Ile Gln  
100 105 110

Asp Glu Asp Lys Thr Val His Val Met Trp Ser Val Pro Phe Asp Tyr  
115 120 125

Asn Leu Tyr Ser Asn Trp Trp Asn Ile Ala Val Val Asp Gly Arg Gln  
130 135 140

Pro Pro Asp Ser Asn Val His Asp Asn Leu Tyr Asn Gly Ser Gly Gly  
145 150 155 160

Met Pro Tyr Pro Asn Lys Pro Asp Gln Tyr Ile Asn Asn Glu Gln Lys  
165 170 175

Gly Phe His Leu Phe Gly Ser Met Thr Asn Asn Gly Gln Ala Thr Ile  
180 185 190

Glu Val Glu Leu Lys Lys Ala  
195

&lt;210&gt; 43

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; Actinia equina

&lt;400&gt; 43

Arg Ser Ala Asp Val Ala Gly Ala Val Ile Asp Gly Ala Ser Leu Ser  
1 5 10 15

Phe Asp Ile Leu Lys Thr Val Leu Glu Ala Leu Gly Asn Val Lys Arg  
20 25 30

Lys Ile Ala Val Gly Val Asp Asn Glu Ser Gly Lys Thr Trp Thr Ala  
35 40 45

Leu Asn Thr Tyr Phe Arg Ser Gly Thr Ser Asp Ile Val Leu Pro His  
50 55 60

Lys Val Pro His Gly Lys Ala Leu Leu Tyr Asn Gly Gln Lys Asp Arg  
65 70 75 80

Gly Pro Val Ala Thr Gly Ala Val Gly Val Leu Ala Tyr Leu Met Ser  
85 90 95

Asp Gly Asn Thr Leu Ala Val Leu Phe Ser Val Pro Tyr Asp Tyr Asn  
100 105 110

Trp Tyr Ser Asn Trp Trp Asn Val Arg Ile Tyr Lys Gly Lys Arg Arg  
115 120 125

Ala Asp Gln Arg Met Tyr Glu Glu Leu Tyr Tyr Asn Leu Ser Pro Phe  
130 135 140

Arg Gly Asp Asn Gly Trp His Thr Arg Asn Leu Gly Tyr Gly Leu Lys  
145 150 155 160

Ser Arg Gly Phe Met Asn Ser Ser Gly His Ala Ile Leu Glu Ile His  
165 170 175

Val Ser Lys Ala  
180

&lt;210&gt; 44

&lt;211&gt; 182

&lt;212&gt; PRT

&lt;213&gt; Physcomitrella patens

&lt;400&gt; 44

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

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

Lys Ile Ala Ile Gly Phe Lys Asn Leu Thr Asp Tyr Thr Leu Glu Asn  
35 40 45

Leu Gly Val Tyr Phe Asn Ser Gly Ser Ser Asp Arg Ser Ile Ala Tyr  
50 55 60

Lys Ile Asn Ala Gln Glu Ala Leu Leu Phe Ser Ala Arg Lys Ser Asp  
65 70 75 80

His Thr Ala Arg Gly Thr Val Gly Thr Phe Ser Tyr Tyr Ile Gln Asp  
85 90 95

Glu Asp Lys Thr Val His Val Met Trp Ser Val Pro Phe Asp Tyr Asn  
100 105 110

Leu Tyr Ser Asn Trp Trp Asn Ile Ala Val Val Asp Gly Arg Gln Pro  
115 120 125

Pro Asp Ser Asn Val His Asp Asn Leu Tyr Asn Gly Ser Gly Gly Met  
130 135 140

Pro Tyr Pro Asn Lys Pro Asp Gln Tyr Ile Asn Asn Glu Gln Lys Gly  
145 150 155 160

Phe His Leu Phe Gly Ser Met Thr Asn Asn Gly Gln Ala Thr Ile Glu  
165 170 175

Val Glu Leu Lys Lys Ala  
180

<210> 45

<211> 204

<212> PRT

<213> Gallus gallus

<400> 45

Met Pro Pro Lys Glu Lys Lys Glu Asn Asp Lys Pro Cys Asn Asp Asn  
1 5 10 15

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

Ile Asp Val Cys Arg Ser Val Gly Leu Glu Ile Ile Asn Arg Thr Arg  
35 40 45

Thr Val Thr Leu Thr Asp Phe Arg Ser Tyr Cys Phe Ser Gly Lys Ile  
50 55 60

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

Ile Phe Ala Lys Thr Pro Tyr Ser Leu Arg Gly Ser Val Gly Thr Val  
85 90 95

Val Cys Lys Ala Asp Thr Phe Phe Leu Ala Ile Thr Phe Ser Asn Pro

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

Glu Pro Asn His Leu Gly Asn Leu Gly Asp Val Phe Ser Lys Met Met  
130 135 140

Lys Ser Lys Pro Tyr Cys Gly Ser Ser Leu Phe Gln Arg Ala Val Leu  
145 150 155 160

Glu Ser Glu His Glu Thr Leu Glu Val Ser Lys Gly Ser Ile Arg Val  
165 170 175

Gln Ala Lys Met Ser Asn Asn Arg Lys Ala Ile Leu Lys Val Gln Val  
180 185 190

Glu Asp Met Asp Pro Pro Pro Tyr Ser Lys Gly Met  
195 200

<210> 46

<211> 166

<212> PRT

<213> Gallus gallus

<400> 46

Leu Met Lys Asn Ile Asp Val Cys Arg Ser Val Gly Leu Glu Ile Ile  
1 5 10 15

Asn Arg Thr Arg Thr Val Thr Leu Thr Asp Phe Arg Ser Tyr Cys Phe  
20 25 30

Ser Gly Lys Ile Val Thr Thr Leu Pro Phe Glu Ile Gly Pro Asp Ser  
35 40 45

Lys Gly Ile Cys Ile Phe Ala Lys Thr Pro Tyr Ser Leu Arg Gly Ser  
50 55 60

Val Gly Thr Val Val Cys Lys Ala Asp Thr Phe Phe Leu Ala Ile Thr  
65 70 75 80

Phe Ser Asn Pro Tyr Asp Tyr Ile Leu Tyr Lys Ile Glu Phe Ala Leu  
85 90 95

Glu Ile Phe Thr Glu Pro Asn His Leu Gly Asn Leu Gly Asp Val Phe  
100 105 110

Ser Lys Met Met Lys Ser Lys Pro Tyr Cys Gly Ser Ser Leu Phe Gln  
115 120 125

Arg Ala Val Leu Glu Ser Glu His Glu Thr Leu Glu Val Ser Lys Gly  
130 135 140

Ser Ile Arg Val Gln Ala Lys Met Ser Asn Asn Arg Lys Ala Ile Leu  
145 150 155 160

Lys Val Gln Val Glu Asp  
165

<210> 47

<211> 220

<212> PRT

<213> Ornithorhynchus anatinus

<400> 47

Met Ala Gln Thr Ile Glu His Leu Val His Glu Val Glu Ala Gly Arg  
1 5 10 15

Cys Val Gly Ile Glu Ile Thr Asn Thr Thr Asn Met Thr Phe Arg Ser  
20 25 30

Pro Arg Thr Phe Cys Phe Ser Gly His Thr Leu Thr Pro Pro Thr Pro  
35 40 45

Ile Ile His Pro Asn Asn Ala Gly Phe Cys Ile Phe Val Lys Arg Lys  
50 55 60

Phe Ser Leu Arg Gly Ser Val Gly Leu Leu Val Tyr Glu Ile Glu Asp  
65 70 75 80

Gln Thr Leu Ala Ile Met Phe Ser Asn Pro Phe Asp Tyr Asn Phe Phe  
85 90 95

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

Asp Leu Lys Ala Phe Phe Glu Leu Leu Tyr His Glu Lys Gln Lys Gly  
115 120 125

Trp Leu Lys Met Ala Lys Glu Lys Leu Cys Glu Cys Gln Cys Pro Val  
130 135 140

Ser Leu Glu Asn Asn Gly Ile Arg Val Thr Ala Thr Met Ser Asn Asn  
145 150 155 160

Ala Lys Ala Ile Ile Lys Leu Ser Ser Pro Asp Ala Lys Pro Pro Glu  
165 170 175

Gly Asp Val Ala Asp Val Gln Pro Thr Thr Val Arg Arg Pro Asn Pro  
180 185 190

Pro Pro Phe Pro Ser Pro Arg Pro Arg Ile Gly Ser Asp Leu Thr Gly  
195 200 205

Asp Gln Leu Ala Thr Leu Asp Phe Glu Ser Gly Lys

210

215

<210> 48  
<211> 157  
<212> PRT  
<213> Actinia equina

<400> 48  
Leu Glu Ala Leu Gly Asn Val Lys Arg Lys Ile Ala Val Gly Val Asp  
1 5 10 15

Asn Glu Ser Gly Lys Thr Trp Thr Ala Leu Asn Thr Tyr Phe Arg Ser  
20 25 30

Gly Thr Ser Asp Ile Val Leu Pro His Lys Val Pro His Gly Lys Ala  
35 40 45

Leu Leu Tyr Asn Gly Gln Lys Asp Arg Gly Pro Val Ala Thr Gly Ala  
50 55 60

Val Gly Val Leu Ala Tyr Leu Met Ser Asp Gly Asn Thr Leu Ala Val  
65 70 75 80

Leu Phe Ser Val Pro Tyr Asp Tyr Asn Trp Tyr Ser Asn Trp Trp Asn  
85 90 95

Val Arg Ile Tyr Lys Gly Lys Arg Arg Ala Asp Gln Arg Met Tyr Glu  
100 105 110

Glu Leu Tyr Tyr Asn Leu Ser Pro Phe Arg Gly Asp Asn Gly Trp His  
115 120 125

Thr Arg Asn Leu Gly Tyr Gly Leu Lys Ser Arg Gly Phe Met Asn Ser  
130 135 140

Ser Gly His Ala Ile Leu Glu Ile His Val Ser Lys Ala  
145 150 155

<210> 49  
<211> 165  
<212> PRT  
<213> Ornithorhynchus anatinus

<400> 49  
Leu Val His Glu Val Glu Ala Gly Arg Cys Val Gly Ile Glu Ile Thr  
1 5 10 15

Asn Thr Thr Asn Met Thr Phe Arg Ser Pro Arg Thr Phe Cys Phe Ser  
20 25 30

Gly His Thr Leu Thr Pro Pro Thr Pro Ile Ile His Pro Asn Asn Ala  
35 40 45

Gly Phe Cys Ile Phe Val Lys Arg Lys Phe Ser Leu Arg Gly Ser Val

50

55

60

Gly Leu Leu Val Tyr Glu Ile Glu Asp Gln Thr Leu Ala Ile Met Phe  
65 70 75 80

Ser Asn Pro Phe Asp Tyr Asn Phe Phe Lys Val Glu Phe Ala Val Ala  
85 90 95

Leu Ser Gly Tyr Lys Glu Glu Thr Gln Asp Leu Lys Ala Phe Phe Glu  
100 105 110

Leu Leu Tyr His Glu Lys Gln Lys Gly Trp Leu Lys Met Ala Lys Glu  
115 120 125

Lys Leu Cys Glu Cys Gln Cys Pro Val Ser Leu Glu Asn Asn Gly Ile  
130 135 140

Arg Val Thr Ala Thr Met Ser Asn Asn Ala Lys Ala Ile Ile Lys Leu  
145 150 155 160

Ser Ser Pro Asp Ala  
165

<210> 50  
<211> 265  
<212> DNA  
<213> Aiptasia pulchella

<400> 50  
gtgtcgccaa cgagtcggga tgcacttggg aaaagccaaa tacatacttc ttctctggtgta 60  
ctgaggtata aagtgcctcc ctctaaagct tgagaataaa aaagcacttt tgtacggccc 120  
acgtaagaca acagggcctg ttgccacggg agctgttggg gtgctcactt acaaaatggt 180  
gtgcaccaat gagacgaaca ctctggctgt tcttttcagt gtacccttcg actacaactt 240  
gtacagcaac tgggtggaaat gtcaa 265

<210> 51  
<211> 14  
<212> PRT  
<213> Aiptasia pulchella

<400> 51  
Phe Ser Val Pro Phe Asp Tyr Asn Leu Tyr Ser Asn Trp Trp  
1 5 10

<210> 52  
<211> 254  
<212> DNA  
<213> Anemonia viridans

<220>  
<221> modified\_base  
<222> (37)..(37)  
<223> a, c, t, g, unknown or other

<220>  
 <221> modified\_base  
 <222> (70)..(70)  
 <223> a, c, t, g, unknown or other

<400> 52  
 tgtgtcgaca acgagtcggg caagacgtgg accgcantga acacatactt ccgttctggc 60  
 acctctgath tcttccttcc ccatacagtt ccacatggta aggcactgct ctacaacggt 120  
 cagaaagatc gtggtccagt tgcgactggc gtggttggag tacttgctta tgccatgagc 180  
 gatggaaaca ccctggccgt tttgttcagc rttccctatg actataacct gtacagcaac 240  
 tgggtggaatg tcaa 254

<210> 53  
 <211> 20  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 53  
 Cys Arg Gln Arg Val Gly Met His Leu Gly Lys Ala Lys Tyr Ile Leu  
 1 5 10 15

Leu Leu Trp Tyr  
 20

<210> 54  
 <211> 15  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <221> source  
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 54  
 Met Phe Ser Val Pro Phe Asp Tyr Asn Trp Tyr Ser Asn Trp Trp  
 1 5 10 15

<210> 55  
 <211> 16  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 55  
 Cys Phe Ser Val Pro Phe Asp Tyr Asn Trp Tyr Ser Asn Trp Trp Cys  
 1 5 10 15

<210> 56  
 <211> 8  
 <212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 56

Cys Phe Asp Tyr Asn Trp Tyr Cys  
1 5

<210> 57

<211> 15

<212> PRT

<213> Unknown

<220>

<223> Description of Unknown: Peptide sequence

<400> 57

Leu Phe Ser Val Pro Tyr Asp Tyr Asn Leu Tyr Ser Asn Trp Trp  
1 5 10 15

<210> 58

<211> 15

<212> PRT

<213> Unknown

<220>

<223> Description of Unknown: Peptide sequence

<400> 58

Met Phe Ser Val Pro Tyr Asp Tyr Asn Leu Tyr Ser Asn Trp Val  
1 5 10 15

<210> 59

<211> 15

<212> PRT

<213> Unknown

<220>

<223> Description of Unknown: Peptide sequence

<400> 59

Leu Phe Ser Val Pro Phe Asp Tyr Asn Phe Tyr Ser Asn Trp Trp  
1 5 10 15

<210> 60

<211> 15

<212> PRT

<213> Unknown

<220>

<223> Description of Unknown: Peptide sequence

<400> 60

Leu Phe Ser Ile Pro Phe Asp Tyr Asn Leu Tyr Ser Asn Trp Trp  
1 5 10 15

<210> 61

<211> 15

<212> PRT

<213> Unknown

&lt;220&gt;

&lt;223&gt; Description of Unknown: Peptide sequence

&lt;400&gt; 61

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Phe | Ser | Val | Pro | Phe | Asp | Tyr | Asn | Leu | Tyr | Lys | Asn | Trp | Phe |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |

&lt;210&gt; 62

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic polypeptide

&lt;400&gt; 62

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Ile | Lys | Cys | Leu | Pro | Leu | Lys | Leu | Glu | Asn | Lys | Lys | Ala | Leu | Leu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Tyr | Gly | Pro | Arg | Lys | Thr | Thr | Gly | Pro | Val | Ala | Thr | Gly | Ala | Val | Gly |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Leu | Thr | Tyr | Lys | Met | Leu | Cys | Thr | Asn | Glu | Thr | Asn | Thr | Leu | Ala |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Leu | Phe | Ser | Val | Pro | Phe | Asp | Tyr | Asn | Leu | Tyr | Ser | Asn | Trp | Trp |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |

|     |     |     |
|-----|-----|-----|
| Lys | Cys | Gln |
| 65  |     |     |