SEQUENCE LISTING

<110> EUROIMMUN Medizinische Labordiagnostika AG

<120> Methods and reagents for detecting an antibody to a sesame nsLTP

<130> 19PP026SG

<160> 44

<170> PatentIn version 3.5

<210> 1
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<213> Sesamum indicum

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Val Leu Ala Val Ala Glu Val His Glu Thr Gly Ala Ala Pro Cys Asn
            20                  25                  30


Pro Val Glu Leu Ser Pro Cys Leu Ala Ala Ile Ser Gly Ser Gln Pro
        35                  40                  45


Pro Ser Ala Glu Cys Cys Ser Lys Leu Lys Glu Gln Val Pro Cys Phe
    50                  55                  60


Cys Asp Tyr Val Lys Asn Pro Val Phe Lys Pro Tyr Val Asp Ser Pro
65                  70                  75                  80


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Ala Asn Asp Leu Ser Pro Cys Ile Asn Tyr Val Met Tyr Gly Gly Ala
        35                  40                  45

Gly Thr Pro Pro Val Pro Cys Cys Thr Gly Ile Lys Thr Leu Tyr Asn
    50                  55                  60

Gln Ala Ser Ser Thr Ala Asp Arg Gln Ala Val Cys Gly Cys Leu Lys
65                  70                  75                  80

Ser Val Ala Gly Gln Ala Ser Pro Ala Ile Ile Gly Thr Ala Ala Ala
                85                  90                  95

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Ser Ile Met Ser Val Val Pro Glu Gly Glu Ala Ala Ile Gly Cys Gly
            20                  25                  30

Thr Val Val Ser Tyr Leu Asn Ser Cys Phe Pro Tyr Val Thr Gly Thr
        35                  40                  45

Gly Ala Leu Gly Gly Cys Cys Lys Gly Ile Lys Asp Leu Tyr Ala Ala
    50                  55                  60

Ala Gln Thr Thr Ala Asp Arg Gln Ser Val Cys Asp Cys Leu Lys Asp
65                  70                  75                  80
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Leu Ala Ala Ser Thr Thr Gly Val Asp Leu Gly Lys Ala Ala Gly Leu
                85                  90                  95


Pro Ser Gln Cys Gly Leu Asn Ile Pro Tyr Lys Ile Ile Pro Ser Thr
            100                 105                 110


Asp Cys Ser Lys Val Gln
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Met Ala Gly Ile Ile Arg Pro Met Cys Ile Leu Leu Ile Ala Ala Val
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            20                  25                  30


Thr Val Val Ser Tyr Leu Asn Pro Cys Leu Pro Tyr Val Thr Asn Lys
        35                  40                  45


Gly Pro Leu Gly Ser Cys Cys Gly Gly Val Lys Gly Leu Tyr Gly Ala
    50                  55                  60


Ala Gln Thr Ala Gln Asp Arg Gln Ser Val Cys Ser Cys Leu Lys Ser
65                  70                  75                  80


Leu Ala Gly Ser Tyr Lys Asp Val Asp Leu Asn Lys Ala Ala Gly Leu
                85                  90                  95


Pro Gly Gln Cys Gly Val Asn Ile Pro Tyr Lys Ile Ser Pro Ser Thr
            100                 105                 110


Asp Cys Ser Lys Val Asn
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            20   25   30

Ser Val Ile Ser Tyr Leu Gly Ser Cys Arg Pro Tyr Val Thr Asp Lys
        35   40   45

Gly Pro Leu Gly Gly Cys Cys Ser Gly Val Lys Gly Leu Tyr Lys Ala
    50   55   60

Ala Lys Thr Thr Ala Asp Arg Gln Ala Thr Cys Ser Cys Leu Lys Thr
65   70   75   80

Leu Ala Ser Thr Tyr Lys Gly Val Asn Leu Ser Lys Ala Ala Gly Leu
                85   90   95

Pro Gln Gln Cys Gly Val Asn Ile Pro Tyr Lys Ile Ser Pro Ser Thr
            100   105   110

Asp Cys Ser Lys Val Thr
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cagggtcgca gccgccgtcg gcggagtgct gcagcaagct gaaggagcag gtgccctgct 120

tctgtgacta cgtgaagaac ccggttttca agccgtatgt cgactctcct aatgccaaga 180

aggttgctgc aacctgcggc gtcgccttcc ccacatgttg actcgaggag accgaa 236

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<212> DNA
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<223> Sesamum indicum lipid transfer protein (LTP2), cDNA fragment

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aactacgtga tgtatggtgg ggcggggacg ccaccggtac catgctgcac cgggataaag 120

accctctaca atcaggcaag cagcaccgct gaccgccagg ctgtttgtgg gtgcttgaaa 180

tctgttgccg gccaagccag ccctgccatc attggcacag ccgccgcact tcctggcaaa 240

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ctcgagagtc ttcggt 316

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<212> DNA
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cggcggccca aaccacagcc gaccgacaga gcgtgtgcga ctgcctgaaa gatcttgctg 180

cctcgaccac tggcgtcgac ctcggcaaag ctgctggact ccccagccag tgtggtctta 240

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ggagcagccc agactgcaca agatcgtcaa agcgtgtgca gctgcttgaa atctctcgct 180

ggctcataca aagatgtcga cctgaacaag gccgctggac tccctggaca atgtggcgtc 240

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cttcacc 307

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aaggctgcaa aaaccaccgc ggatcgtcag gccacttgca gctgcctcaa aactcttgcc 180

agtacctaca aaggtgtcaa tcttagcaag gcagccggac ttcctcagca atgtggtgtt 240

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20 25 30

Xaa Lys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
35 40 45

Xaa Cys Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
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20 25 30

Xaa Lys Xaa Leu Tyr Xaa Xaa Ala Xaa Xaa Xaa Xaa Asp Arg Gln Xaa
35 40 45

Xaa Cys Xaa Cys Leu Lys Xaa Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa
50 55 60

Xaa Xaa Xaa Ala Ala Xaa Leu Pro Xaa Xaa Cys Gly Xaa Xaa Ile Pro
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Tyr Xaa Ile Xaa Pro Ser Thr Asp Cys Ser Lys Val Xaa
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Val Thr Xaa Xaa Gly Xaa Leu Gly Xaa Cys Cys Xaa Gly Xaa Lys Xaa
20 25 30

Leu Tyr Xaa Ala Ala Xaa Thr Xaa Xaa Asp Arg Gly Xaa Xaa Cys Xaa
35 40 45

Cys Leu Lys Xaa Leu Ala Xaa Xaa Xaa Xaa Xaa Val Xaa Leu Xaa Lys
50 55 60

Ala Ala Gly Leu Pro Xaa Gln Cys Gly Xaa Asn Ile Pro Tyr Lys Ile
65 70 75 80

Xaa Pro Ser Thr Asp Cys Ser Lys Val
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            20                  25                  30

Ile Pro Ala Glu Ala Val Ile Gly Tyr Ser Asp Leu Glu Gly Asp Phe
        35                  40                  45

Asp Val Ala Val Leu Pro Phe Ser Asn Ser Thr Asn Asn Gly Leu Leu
    50                  55                  60

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

Ser Leu Glu Lys Arg Ala Met Ala His His His His His His Gly Gly
                85                  90                  95

Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Leu Glu Val Leu Phe Gln
            100                 105                 110

Gly Pro Ser Ala Met Ala Pro Cys Asn Pro Val Glu Leu Ser Pro Cys
        115                 120                 125

Leu Ala Ala Ile Ser Gly Ser Gln Pro Pro Ser Ala Glu Cys Cys Ser
    130                 135                 140

Lys Leu Lys Glu Gln Val Pro Cys Phe Cys Asp Tyr Val Lys Asn Pro
145                 150                 155                 160

Val Phe Lys Pro Tyr Val Asp Ser Pro Asn Ala Lys Lys Val Ala Ala
                165                 170                 175

Thr Cys Gly Val Ala Phe Pro Thr Cys
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            20                  25                  30


Ile Pro Ala Glu Ala Val Ile Gly Tyr Ser Asp Leu Glu Gly Asp Phe
        35                  40                  45


Asp Val Ala Val Leu Pro Phe Ser Asn Ser Thr Asn Asn Gly Leu Leu
    50                  55                  60


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


Ser Leu Glu Lys Arg Ala Met Ala His His His His His His Gly Gly
                85                  90                  95


Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Leu Glu Val Leu Phe Gln
            100                 105                 110


Gly Pro Ser Ala Met Ala Ile Ser Cys Gly Thr Val Ala Asn Asp Leu
        115                 120                 125


Ser Pro Cys Ile Asn Tyr Val Met Tyr Gly Gly Ala Gly Thr Pro Pro
    130                 135                 140


Val Pro Cys Cys Thr Gly Ile Lys Thr Leu Tyr Asn Gln Ala Ser Ser
145                 150                 155                 160


Thr Ala Asp Arg Gln Ala Val Cys Gly Cys Leu Lys Ser Val Ala Gly
                165                 170                 175


Gln Ala Ser Pro Ala Ile Ile Gly Thr Ala Ala Ala Leu Pro Gly Lys
            180                 185                 190


Cys Gly Val Ser Ile Pro Tyr Glu Ile Ser Pro Ser Thr Asp Cys Ser
        195                 200                 205
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Lys Val His
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1   5   10   15

Ala Leu Ala Ala Pro Val Asn Thr Thr Thr Glu Asp Glu Thr Ala Gln
            20   25   30

Ile Pro Ala Glu Ala Val Ile Gly Tyr Ser Asp Leu Glu Gly Asp Phe
        35   40   45

Asp Val Ala Val Leu Pro Phe Ser Asn Ser Thr Asn Asn Gly Leu Leu
    50   55   60

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

Ser Leu Glu Lys Arg Ala Met Ala His His His His His His Gly Gly
                85   90   95

Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Leu Glu Val Leu Phe Gln
            100   105   110

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

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

Cys Lys Gly Ile Lys Asp Leu Tyr Ala Ala Ala Gln Thr Thr Ala Asp
145   150   155   160

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Arg Gln Ser Val Cys Asp Cys Leu Lys Asp Leu Ala Ala Ser Thr Thr
                165                 170                 175


Gly Val Asp Leu Gly Lys Ala Ala Gly Leu Pro Ser Gln Cys Gly Leu
            180                 185                 190


Asn Ile Pro Tyr Lys Ile Ile Pro Ser Thr Asp Cys Ser Lys Val Gln
        195                 200                 205


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Ala Leu Ala Ala Pro Val Asn Thr Thr Thr Glu Asp Glu Thr Ala Gln
            20                  25                  30


Ile Pro Ala Glu Ala Val Ile Gly Tyr Ser Asp Leu Glu Gly Asp Phe
        35                  40                  45


Asp Val Ala Val Leu Pro Phe Ser Asn Ser Thr Asn Asn Gly Leu Leu
    50                  55                  60


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


Ser Leu Glu Lys Arg Ala Met Ala His His His His His His Gly Gly
                85                  90                  95


Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Leu Glu Val Leu Phe Gln
            100                 105                 110


Gly Pro Ser Ala Met Ala Ile Gly Cys Gly Thr Val Val Ser Tyr Leu
        115                 120                 125
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Asn Pro Cys Leu Pro Tyr Val Thr Asn Lys Gly Pro Leu Gly Ser Cys
    130                 135                 140

Cys Gly Gly Val Lys Gly Leu Tyr Gly Ala Ala Gln Thr Ala Gln Asp
145                 150                 155                 160

Arg Gln Ser Val Cys Ser Cys Leu Lys Ser Leu Ala Gly Ser Tyr Lys
                165                 170                 175

Asp Val Asp Leu Asn Lys Ala Ala Gly Leu Pro Gly Gln Cys Gly Val
            180                 185                 190

Asn Ile Pro Tyr Lys Ile Ser Pro Ser Thr Asp Cys Ser Lys Val Asn
        195                 200                 205
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<210> 21
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Ala Leu Ala Ala Pro Val Asn Thr Thr Thr Glu Asp Glu Thr Ala Gln
            20                  25                  30

Ile Pro Ala Glu Ala Val Ile Gly Tyr Ser Asp Leu Glu Gly Asp Phe
        35                  40                  45

Asp Val Ala Val Leu Pro Phe Ser Asn Ser Thr Asn Asn Gly Leu Leu
    50                  55                  60

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

Ser Leu Glu Lys Arg Ala Met Ala His His His His His His Gly Gly
                85                  90                  95
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Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Leu Glu Val Leu Phe Gln
            100                 105                 110

Gly Pro Ser Ala Met Ala Leu Gly Cys Gly Ser Val Ile Ser Tyr Leu
        115                 120                 125

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

Cys Ser Gly Val Lys Gly Leu Tyr Lys Ala Ala Lys Thr Thr Ala Asp
145                 150                 155                 160

Arg Gln Ala Thr Cys Ser Cys Leu Lys Thr Leu Ala Ser Thr Tyr Lys
                165                 170                 175

Gly Val Asn Leu Ser Lys Ala Ala Gly Leu Pro Gln Gln Cys Gly Val
            180                 185                 190

Asn Ile Pro Tyr Lys Ile Ser Pro Ser Thr Asp Cys Ser Lys Val Thr
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gtcaacacta caacagaaga tgaaacggca caaattccgg ctgaagctgt catcggttac      240

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Ala Ala Thr Cys Gly Val Ala Phe Pro Thr Cys
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<210> 29
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Val Met Tyr Gly Gly Ala Gly Thr Pro Pro Val Pro Cys Cys Thr Gly
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Ile Lys Thr Leu
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Ser Ser Thr Ala Asp Arg Gln
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<210> 31
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Pro Gly Lys Cys Gly Val Ser Ile
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<210> 32
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Gln Thr Thr Ala Asp Arg Gln
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Pro Ser Gln Cys Gly Leu Asn Ile
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Leu

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Pro Gly Gln Cys Gly Val Asn Ile
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<220>
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<400> 41

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Tyr Gly Gly Ala Gly Thr Pro Pro Val Pro Cys Cys Thr Gly Ile Lys
            20   25   30

Thr Leu Tyr Asn Gln Ala Ser Ser Thr Ala Asp Arg Gln Ala Val Cys
        35   40   45

Gly Cys Leu Lys Ser Val Ala Gly Gln Ala Ser Pro Ala Ile Ile Gly
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Thr Ala Ala Ala Leu Pro Gly Lys Cys Gly
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<400> 42

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Gly Thr Gly Ala Leu Gly Gly Cys Cys Lys Gly Ile Lys Asp Leu Tyr
20 25 30

Ala Ala Ala Gln Thr Thr Ala Asp Arg Gln Ser Val Cys Asp Cys Leu
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Lys Asp Leu Ala Ala Ser Thr Thr Gly Val Asp Leu Gly Lys Ala Ala
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Gly Leu Pro Ser Gln Cys Gly
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<212> PRT
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<220>
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<400> 43

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Asn Lys Gly Pro Leu Gly Ser Cys Cys Gly Gly Val Lys Gly Leu Tyr
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35 40 45

Lys Ser Leu Ala Gly Ser Tyr Lys Asp Val Asp Leu Asn Lys Ala Ala
50 55 60

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Gly Leu Pro Gln Gln Cys Gly
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