

SEQUENCE LISTING

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<110>  INSTITUT PASTEUR

<120>  USE OF  BASIC PROLIN-RICH LACRIMAL GENE PRODUCTS, SUCH AS
      OPIORPHIN, AS A BIOMARKER

<130>  BET 09P1631

<160>  7

<170>  PatentIn version 3.4

<210>  1
<211>  947
<212>  DNA
<213>  Homo sapiens

<220>
<221>  CDS
<222>  (81)..(686)

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<221>  sig_peptide
<222>  (81)..(143)

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<222>  (156)..(161)
<223>  dibasic site

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ccaaggagca acttttaaaga atg aaa tta act ttc ttc ttg ggc ctg ttg gct      113
                Met Lys Leu Thr Phe Phe Leu Gly Leu Leu Ala
                  1             5             10

ctt att tca tgt ttc aca ccc agt gag agt caa aga ttc tcc aga aga      161
Leu Ile Ser Cys Phe Thr Pro Ser Glu Ser Gln Arg Phe Ser Arg Arg
              15             20             25

cca tat cta cct ggc cag ctg cca cca cct cca ctc tac agg cca aga      209
Pro Tyr Leu Pro Gly Gln Leu Pro Pro Pro Pro Leu Tyr Arg Pro Arg
              30             35             40

tgg gtt cca cca agt ccc cca cct ccc tat gac tca aga ctt aat tca      257
Trp Val Pro Pro Ser Pro Pro Pro Pro Tyr Asp Ser Arg Leu Asn Ser
              45             50             55

cca ctt tct ctt ccc ttt gtc cca ggg cga gtt cca cca tct tct ttc      305
Pro Leu Ser Leu Pro Phe Val Pro Gly Arg Val Pro Pro Ser Ser Phe
              60             65             70             75

tct cga ttt agc caa gca gtc att cta tct caa ctc ttt cca ttg gaa      353

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Ser Arg Phe Ser Gln Ala Val Ile Leu Ser Gln Leu Phe Pro Leu Glu
 80 85 90
 tct att aga caa cct cga ctc ttt ccg ggt tat cca aac cta cat ttc 401
 Ser Ile Arg Gln Pro Arg Leu Phe Pro Gly Tyr Pro Asn Leu His Phe
 95 100 105
 cca cta aga cct tac tat gta gga cct att agg ata tta aaa ccc cca 449
 Pro Leu Arg Pro Tyr Tyr Val Gly Pro Ile Arg Ile Leu Lys Pro Pro
 110 115 120
 ttt cct cct att cct ttt ttt ctt gct att tac ctt cct atc tct aac 497
 Phe Pro Pro Ile Pro Phe Phe Leu Ala Ile Tyr Leu Pro Ile Ser Asn
 125 130 135
 cct gag ccc caa ata aac atc acc acc gca gat aca aca atc acc aca 545
 Pro Glu Pro Gln Ile Asn Ile Thr Thr Ala Asp Thr Thr Ile Thr Thr
 140 145 150 155
 aat ccc ccc acc act gca aca gca acc acc agg cac ttc cac aaa acc 593
 Asn Pro Pro Thr Thr Ala Thr Ala Thr Thr Arg His Phe His Lys Thr
 160 165 170
 cac aat gac gat cag ctc ctc aac agt acc tat ctc ttc aac acc aga 641
 His Asn Asp Asp Gln Leu Leu Asn Ser Thr Tyr Leu Phe Asn Thr Arg
 175 180 185
 gcc tgc cac ctc cat atc agc agc aac ccc cgc agc atc tac tga 686
 Ala Cys His Leu His Ile Ser Ser Asn Pro Arg Ser Ile Tyr
 190 195 200
 aaatactact caaattctcg ccaaccgtcc tcacacagta ttgctcaatg ccaactgtcca 746
 agttacgact tccaaccaaaa ctatattaag cagcccagcc tttaaaagtt tttggcaaaa 806
 actctttgcc atttttgggtt gaacatgcaa taaatgatat tttccaaact gctctgatat 866
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<210> 2
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 <212> PRT
 <213> Homo sapiens

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Met Lys Leu Thr Phe Phe Leu Gly Leu Leu Ala Leu Ile Ser Cys Phe
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Thr Pro Ser Glu Ser Gln Arg Phe Ser Arg Arg Pro Tyr Leu Pro Gly
 20 25 30

Gln Leu Pro Pro Pro Pro Leu Tyr Arg Pro Arg Trp Val Pro Pro Ser
 35 40 45

Pro Pro Pro Pro Tyr Asp Ser Arg Leu Asn Ser Pro Leu Ser Leu Pro
 50 55 60

Phe Val Pro Gly Arg Val Pro Pro Ser Ser Phe Ser Arg Phe Ser Gln
 65 70 75 80

Ala Val Ile Leu Ser Gln Leu Phe Pro Leu Glu Ser Ile Arg Gln Pro
 85 90 95

Arg Leu Phe Pro Gly Tyr Pro Asn Leu His Phe Pro Leu Arg Pro Tyr
 100 105 110

Tyr Val Gly Pro Ile Arg Ile Leu Lys Pro Pro Phe Pro Pro Ile Pro
 115 120 125

Phe Phe Leu Ala Ile Tyr Leu Pro Ile Ser Asn Pro Glu Pro Gln Ile
 130 135 140

Asn Ile Thr Thr Ala Asp Thr Thr Ile Thr Thr Asn Pro Pro Thr Thr
 145 150 155 160

Ala Thr Ala Thr Thr Arg His Phe His Lys Thr His Asn Asp Asp Gln
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Leu Leu Asn Ser Thr Tyr Leu Phe Asn Thr Arg Ala Cys His Leu His
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Ile Ser Ser Asn Pro Arg Ser Ile Tyr
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<210> 3
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Gln Arg Phe Ser Arg
 1 5

<210> 4
 <211> 6
 <212> PRT
 <213> Artificial

<220>
 <223> peptide

<400> 4

Tyr Gln Arg Phe Ser Arg
1 5

<210> 5
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<222> (1)..(1)
<223> Conjugated in a covalent manner to the ovalbumin-(CO-NH) carrier molecule

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Tyr Gln Arg Phe Ser Arg
1 5

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<222> (1)..(2)
<223> 6-polyethylene or 12-polyethylene linker between residues 1 and 2

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Tyr Gln Arg Phe Ser Arg
1 5

<210> 7
<211> 5
<212> PRT
<213> Rattus norvegicus

<400> 7

Gln His Asn Pro Arg
1 5