SEQUENCE LISTING

<110> HANSA MEDICAL AB
<120> METHOD
<130> N403362WO
<150> GB1413240.1
<151> 2014-07-25

<160> 3
<170> PatentIn version 3.0

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<213> Streptococcus pyogenes
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1               5                  10                  15
Tyr His Val Thr Ser Val Trp Thr Lys Gly Val Thr Pro Pro Ala Asn
            20                  25                  30
Phe Thr Gln Gly Glu Asp Val Phe His Ala Pro Tyr Val Ala Asn Gln
        35                  40                  45
Gly Trp Tyr Asp Ile Thr Lys Thr Phe Asn Gly Lys Asp Asp Leu Leu
    50                  55                  60
Cys Gly Ala Ala Thr Ala Gly Asn Met Leu His Trp Trp Phe Asp Gln
65                  70                  75                  80
Asn Lys Asp Gln Ile Lys Arg Tyr Leu Glu Glu His Pro Glu Lys Gln
                85                  90                  95
Lys Ile Asn Phe Asn Gly Glu Gln Met Phe Asp Val Lys Glu Ala Ile
            100                 105                 110
Asp Thr Lys Asn His Gln Leu Asp Ser Lys Leu Phe Glu Tyr Phe Lys
        115                 120                 125
Glu Lys Ala Phe Pro Tyr Leu Ser Thr Lys His Leu Gly Val Phe Pro
    130                 135                 140
Asp His Val Ile Asp Met Phe Ile Asn Gly Tyr Arg Leu Ser Leu Thr
145                 150                 155                 160
Asn His Gly Pro Thr Pro Val Lys Glu Gly Ser Lys Asp Pro Arg Gly
                165                 170                 175
Gly Ile Phe Asp Ala Val Phe Thr Arg Gly Asp Gln Ser Lys Leu Leu
            180                 185                 190
Thr Ser Arg His Asp Phe Lys Glu Lys Asn Leu Lys Glu Ile Ser Asp
        195                 200                 205
Leu Ile Lys Lys Glu Leu Thr Glu Gly Lys Ala Leu Gly Leu Ser His
    210                 215                 220
Thr Tyr Ala Asn Val Arg Ile Asn His Val Ile Asn Leu Trp Gly Ala
225                 230                 235                 240
Asp Phe Asp Ser Asn Gly Asn Leu Lys Ala Ile Tyr Val Thr Asp Ser
                245                 250                 255
Asp Ser Asn Ala Ser Ile Gly Met Lys Lys Tyr Phe Val Gly Val Asn
            260                 265                 270
Ser Ala Gly Lys Val Ala Ile Ser Ala Lys Glu Ile Lys Glu Asp Asn
        275                 280                 285
Ile Gly Ala Gln Val Leu Gly Leu Phe Thr Leu Ser Thr Gly Gln Asp
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Ser Trp Asn Gln Thr Asn
305                 310
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<213> Streptococcus pyogenes
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            20                  25                  30
Ser Lys Ala Gly Gln Glu Ser Gln Lys Val Lys Glu Ile Leu Ala Lys
        35                  40                  45
Ala Gln Gln Ala Asp Lys Gln Ala Gln Glu Leu Ala Lys Met Lys Ile
    50                  55                  60
Pro Glu Lys Ile Pro Met Lys Pro Leu His Gly Pro Leu Tyr Gly Gly
65                  70                  75                  80
Tyr Phe Arg Thr Trp His Asp Lys Thr Ser Asp Pro Thr Glu Lys Asp
                85                  90                  95
Lys Val Asn Ser Met Gly Glu Leu Pro Lys Glu Val Asp Leu Ala Phe
            100                 105                 110
Ile Phe His Asp Trp Thr Lys Asp Tyr Ser Leu Phe Trp Lys Glu Leu
        115                 120                 125
Ala Thr Lys His Val Pro Lys Leu Asn Lys Gln Gly Thr Arg Val Ile
    130                 135                 140
Arg Thr Ile Pro Trp Arg Phe Leu Ala Gly Gly Asp Asn Ser Gly Ile
145                 150                 155                 160
Ala Glu Asp Thr Ser Lys Tyr Pro Asn Thr Pro Glu Gly Asn Lys Ala
                165                 170                 175
Leu Ala Lys Ala Ile Val Asp Glu Tyr Val Tyr Lys Tyr Asn Leu Asp
            180                 185                 190
Gly Leu Asp Val Asp Val Glu His Asp Ser Ile Pro Lys Val Asp Lys
        195                 200                 205
Lys Glu Asp Thr Ala Gly Val Glu Arg Ser Ile Gln Val Phe Glu Glu
    210                 215                 220
Ile Gly Lys Leu Ile Gly Pro Lys Gly Val Asp Lys Ser Arg Leu Phe
225                 230                 235                 240
Ile Met Asp Ser Thr Tyr Met Ala Asp Lys Asn Pro Leu Ile Glu Arg
                245                 250                 255
Gly Ala Pro Tyr Ile Asn Leu Leu Leu Val Gln Val Tyr Gly Ser Gln
            260                 265                 270
Gly Glu Lys Gly Gly Trp Glu Pro Val Ser Asn Arg Pro Glu Lys Thr
        275                 280                 285
Met Glu Glu Arg Trp Gln Gly Tyr Ser Lys Tyr Ile Arg Pro Glu Gln
    290                 295                 300
Tyr Met Ile Gly Phe Ser Phe Tyr Glu Glu Asn Ala Gln Glu Gly Asn
305                 310                 315                 320
Leu Trp Tyr Asp Ile Asn Ser Arg Lys Asp Glu Asp Lys Ala Asn Gly
                325                 330                 335
Ile Asn Thr Asp Ile Thr Gly Thr Arg Ala Glu Arg Tyr Ala Arg Trp
            340                 345                 350
Gln Pro Lys Thr Gly Gly Val Lys Gly Gly Ile Phe Ser Tyr Ala Ile
        355                 360                 365
Asp Arg Asp Gly Val Ala His Gln Pro Lys Lys Tyr Ala Lys Gln Lys
    370                 375                 380
Glu Phe Lys Asp Ala Thr Asp Asn Ile Phe His Ser Asp Tyr Ser Val
385                 390                 395                 400
Ser Lys Ala Leu Lys Thr Val Met Leu Lys Asp Lys Ser Tyr Asp Leu
                405                 410                 415
Ile Asp Glu Lys Asp Phe Pro Asp Lys Ala Leu Arg Glu Ala Val Met
            420                 425                 430
Ala Gln Val Gly Thr Arg Lys Gly Asp Leu Glu Arg Phe Asn Gly Thr
        435                 440                 445
Leu Arg Leu Asp Asn Pro Ala Ile Gln Ser Leu Glu Gly Leu Asn Lys
    450                 455                 460
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Phe Lys Lys Leu Ala Gln Leu Asp Leu Ile Gly Leu Ser Arg Ile Thr
465                 470                 475                 480
Lys Leu Asp Arg Ser Val Leu Pro Ala Asn Met Lys Pro Gly Lys Asp
                485                 490                 495
Thr Leu Glu Thr Val Leu Glu Thr Tyr Lys Lys Asp Asn Lys Glu Glu
            500                 505                 510
Pro Ala Thr Ile Pro Pro Val Ser Leu Lys Val Ser Gly Leu Thr Gly
        515                 520                 525
Leu Lys Glu Leu Asp Leu Ser Gly Phe Asp Arg Glu Thr Leu Ala Gly
    530                 535                 540
Leu Asp Ala Ala Thr Leu Thr Ser Leu Glu Lys Val Asp Ile Ser Gly
545                 550                 555                 560
Asn Lys Leu Asp Leu Ala Pro Gly Thr Glu Asn Arg Gln Ile Phe Asp
                565                 570                 575
Thr Met Leu Ser Thr Ile Ser Asn His Val Gly Ser Asn Glu Gln Thr
            580                 585                 590
Val Lys Phe Asp Lys Gln Lys Pro Thr Gly His Tyr Pro Asp Thr Tyr
        595                 600                 605
Gly Lys Thr Ser Leu Arg Leu Pro Val Ala Asn Glu Lys Val Asp Leu
    610                 615                 620
Gln Ser Gln Leu Leu Phe Gly Thr Val Thr Asn Gln Gly Thr Leu Ile
625                 630                 635                 640
Asn Ser Glu Ala Asp Tyr Lys Ala Tyr Gln Asn His Lys Ile Ala Gly
                645                 650                 655
Arg Ser Phe Val Asp Ser Asn Tyr His Tyr Asn Asn Phe Lys Val Ser
            660                 665                 670
Tyr Glu Asn Tyr Thr Val Lys Val Thr Asp Ser Thr Leu Gly Thr Thr
        675                 680                 685
Thr Asp Lys Thr Leu Ala Thr Asp Lys Glu Glu Thr Tyr Lys Val Asp
    690                 695                 700
Phe Phe Ser Pro Ala Asp Lys Thr Lys Ala Val His Thr Ala Lys Val
705                 710                 715                 720
Ile Val Gly Asp Glu Lys Thr Met Met Val Asn Leu Ala Glu Gly Ala
                725                 730                 735
Thr Val Ile Gly Gly Ser Ala Asp Pro Val Asn Ala Arg Lys Val Phe
            740                 745                 750
Asp Gly Gln Leu Gly Ser Glu Thr Asp Asn Ile Ser Leu Gly Trp Asp
        755                 760                 765
Ser Lys Gln Ser Ile Ile Phe Lys Leu Lys Glu Asp Gly Leu Ile Lys
    770                 775                 780
His Trp Arg Phe Phe Asn Asp Ser Ala Arg Asn Pro Glu Thr Thr Asn
785                 790                 795                 800
Lys Pro Ile Gln Glu Ala Ser Leu Gln Ile Phe Asn Ile Lys Asp Tyr
                805                 810                 815
Asn Leu Asp Asn Leu Leu Glu Asn Pro Asn Lys Phe Asp Asp Glu Lys
            820                 825                 830
Tyr Trp Ile Thr Val Asp Thr Tyr Ser Ala Gln Gly Glu Arg Ala Thr
        835                 840                 845
Ala Phe Ser Asn Thr Leu Asn Asn Ile Thr Ser Lys Tyr Trp Arg Val
    850                 855                 860
Val Phe Asp Thr Lys Gly Asp Arg Tyr Ser Ser Pro Val Val Pro Glu
865                 870                 875                 880
Leu Gln Ile Leu Gly Tyr Pro Leu Pro Asn Ala Asp Thr Ile Met Lys
                885                 890                 895
Thr Val Thr Thr Ala Lys Glu Leu Ser Gln Gln Lys Asp Lys Phe Ser
            900                 905                 910
Gln Lys Met Leu Asp Glu Leu Lys Ile Lys Glu Met Ala Leu Glu Thr
        915                 920                 925
Ser Leu Asn Ser Lys Ile Phe Asp Val Thr Ala Ile Asn Ala Asn Ala
    930                 935                 940
Gly Val Leu Lys Asp Cys Ile Glu Lys Arg Gln Leu Leu Lys Lys
945                 950                 955
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<210> 3
<211> 312
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<213> Streptococcus pyogenes
<400> 3

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Asp Ser Phe Ser Ala Asn Gln Glu Ile Arg Tyr Ser Glu Val Thr Pro
1               5                  10                  15
Tyr His Val Thr Ser Val Trp Thr Lys Gly Val Thr Pro Pro Ala Lys
            20                  25                  30
Phe Thr Gln Gly Glu Asp Val Phe His Ala Pro Tyr Val Ala Asn Gln
        35                  40                  45
Gly Trp Tyr Asp Ile Thr Lys Thr Phe Asn Gly Lys Asp Asp Leu Leu
    50                  55                  60
Cys Gly Ala Ala Thr Ala Gly Asn Met Leu His Trp Trp Phe Asp Gln
65                  70                  75                  80
Asn Asn Glu Lys Ile Glu Ala Tyr Leu Lys Lys His Pro Asp Lys Gln
                85                  90                  95
Lys Ile Met Phe Gly Asp Gln Glu Leu Leu Asp Val Arg Lys Val Ile
            100                 105                 110
Asn Thr Lys Gly Asp Gln Thr Asn Ser Glu Leu Phe Asn Tyr Phe Arg
        115                 120                 125
Asp Lys Ala Phe Pro Gly Leu Ser Ala Arg Arg Ile Gly Val Met Pro
    130                 135                 140
Asp Leu Val Leu Asp Met Phe Ile Asn Gly Tyr Tyr Leu Asn Val Tyr
145                 150                 155                 160
Lys Thr Gln Thr Thr Asp Val Asn Arg Thr Tyr Gln Glu Lys Asp Arg
                165                 170                 175
Arg Gly Gly Ile Phe Asp Ala Val Phe Thr Arg Gly Asp Gln Ser Lys
            180                 185                 190
Leu Leu Thr Ser Arg His Asp Phe Lys Glu Lys Thr Leu Lys Glu Ile
        195                 200                 205
Ser Asp Leu Ile Lys Lys Glu Leu Thr Glu Gly Lys Ala Leu Gly Leu
    210                 215                 220
Ser His Thr Tyr Ala Asn Val Arg Ile Asn His Val Ile Asn Leu Trp
225                 230                 235                 240
Gly Ala Asp Phe Asp Ser Asn Gly Asn Leu Glu Ala Ile Tyr Val Thr
                245                 250                 255
Asp Ser Asp Ser Asn Ala Ser Ile Gly Met Lys Lys Tyr Phe Val Gly
            260                 265                 270
Val Asn Ser Ala Gly Lys Val Ala Ile Ser Ala Lys Glu Ile Lys Glu
        275                 280                 285
Asp Asn Ile Gly Ala Gln Val Leu Gly Leu Phe Thr Leu Ser Thr Gly
    290                 295                 300
Gln Asp Ser Trp Asn Gln Thr Asn
305                 310
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