SEQUENCE LISTING

<110> NETT, Juergen

<120> YEAST STRAINS FOR PROTEIN PRODUCTION

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<151> 2007-12-19

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65   70   75   80
Asp Lys Glu Val Phe Ala Leu Leu Pro Ser Lys Leu Ser Glu Glu Lys
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Tyr Lys Ser Gln Leu Glu Gly Arg Ser Leu Ile Val Lys Lys His Arg
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Leu Ile Pro Leu Glu Ala Ile Val Arg Gly Tyr Ile Thr Gly Ser Ala
        115   120   125
Trp Lys Glu Tyr Lys Asn Ser Lys Thr Val His Gly Val Lys Val Glu
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Pro Ser Thr Lys Ala Glu Gln Gly Glu His Asp Glu Asn Ile Ser Ile
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Lys Gly Ile Ile Ile Ala Asp Thr Lys Phe Glu Phe Gly Leu Asp Glu
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ttcgttctcc tctgatcatc tttgccaatc gctagcatgc cctcagcgtg caaggaaaag 960
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<211> 1676
<212> DNA
<213> Artificial Sequence

<220>
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ggcagttttg ataggcatta ttatagattg ggtaatattt accctgcacc tggaggaact 180
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ctgcatgcgt ctgtaatact ggaactgtta tttttctggt caggatttca ccgctcttgt 300
cgtcatgttt ctcgtcgtct gaaagtaaac tgactttcct ctttccataa acacaaaaat 360
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tatcaacaaa cttacttagt actaataacg aagcactatg gtaagtggca taacatagtg 480
gtattgaagc gaacagtgga tattgaaccc aagcattggc aacatctggc tctgttgata 540
ctgatccgga tcgtttggca ccaattcctg aaacggcgta gtgccaccaa ggtttcgatt 600
tgagaacagg ttcatcatca gagtcaacca ccccaatgtc aatggcaggc tccaacgaag 660
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caccttgccc caattccaat aactttacca gtcccgatgc agacatgata actggtacta 780
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<211> 2018
<212> DNA
<213> Pichia pastoris

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<211> 563
<212> PRT
<213> Pichia pastoris

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Asp Asp Gly Phe Ser Pro Ala Lys His Ile Asn Ala Ala Gln Asp His
        35   40   45
Ile Asp Gly Ser Phe Lys Asp Glu Glu Ala Ile Ala Lys Leu Ala Ala
    50   55   60
Lys Cys Asp Val Leu Thr Val Glu Ile Glu His Val Asn Thr Asp Ala
65   70   75   80
Leu Lys Arg Val Gln Asp Arg Thr Gly Ile Lys Ile Tyr Pro Leu Pro
                85   90   95
Glu Thr Ile Glu Leu Ile Lys Asp Lys Tyr Leu Gln Lys Glu His Leu
            100   105   110

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Ile Lys His Asn Ile Ser Val Thr Lys Ser Gln Gly Ile Glu Ser Asn
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Glu Lys Ala Leu Leu Leu Phe Gly Glu Glu Asn Gly Phe Pro Tyr Leu
    130                 135                 140
Leu Lys Ser Arg Thr Met Ala Tyr Asp Gly Arg Gly Asn Phe Val Val
145                 150                 155                 160
Glu Ser Lys Glu Asp Ile Ser Lys Ala Leu Glu Phe Leu Lys Asp Arg
                165                 170                 175
Pro Leu Tyr Ala Glu Lys Phe Ala Pro Phe Val Lys Glu Leu Ala Val
            180                 185                 190
Met Val Val Arg Ser Leu Glu Gly Glu Val Phe Ser Tyr Pro Thr Val
        195                 200                 205
Glu Thr Val His Lys Asp Asn Ile Cys His Ile Val Tyr Ala Pro Ala
    210                 215                 220
Arg Val Asn Asp Thr Ile Gln Lys Lys Ala Gln Ile Leu Ala Glu Asn
225                 230                 235                 240
Thr Val Lys Thr Phe Pro Gly Ala Gly Ile Phe Gly Val Glu Met Phe
                245                 250                 255
Leu Leu Ser Asp Gly Glu Leu Leu Val Asn Glu Ile Ala Pro Arg Pro
            260                 265                 270
His Asn Ser Gly His Tyr Thr Ile Asp Ala Cys Val Thr Ser Gln Phe
        275                 280                 285
Glu Ala His Val Arg Ala Ile Thr Gly Leu Pro Met Pro Leu Asp Phe
    290                 295                 300
Thr Lys Leu Ser Thr Ser Asn Thr Asn Ala Ile Met Leu Asn Val Leu
305                 310                 315                 320
Gly Ala Glu Lys Ser His Gly Glu Leu Glu Phe Cys Arg Arg Ala Leu
                325                 330                 335
Glu Thr Pro Gly Ala Ser Val Tyr Leu Tyr Gly Lys Thr Thr Arg Leu
            340                 345                 350
Ala Arg Lys Met Gly His Ile Asn Ile Ile Gly Ser Ser Met Leu Glu
        355                 360                 365
Ala Glu Gln Lys Leu Glu Tyr Ile Leu Glu Glu Ser Thr His Leu Pro
    370                 375                 380
Ser Ser Thr Val Ser Ala Asp Thr Lys Pro Leu Val Gly Val Ile Met
385                 390                 395                 400
Gly Ser Asp Ser Asp Leu Pro Val Ile Ser Lys Gly Cys Asp Ile Leu
                405                 410                 415
Lys Gln Phe Gly Val Pro Phe Glu Val Thr Ile Val Ser Ala His Arg
            420                 425                 430
Thr Pro Gln Arg Met Thr Arg Tyr Ala Phe Glu Ala Ala Ser Arg Gly
        435                 440                 445
Ile Lys Ala Ile Ile Ala Gly Ala Gly Gly Ala Ala His Leu Pro Gly
    450                 455                 460
Met Val Ala Ala Met Thr Pro Leu Pro Val Ile Gly Val Pro Val Lys
465                 470                 475                 480
Gly Ser Thr Leu Asp Gly Val Asp Ser Leu His Ser Ile Val Gln Met
                485                 490                 495
Pro Arg Gly Val Pro Val Ala Thr Val Ala Ile Asn Asn Ala Thr Asn
            500                 505                 510
Ala Ala Leu Leu Ala Ile Arg Ile Leu Gly Thr Ile Asp His Lys Trp
        515                 520                 525
Gln Lys Glu Met Ser Lys Tyr Met Asn Ala Met Glu Thr Glu Val Leu
    530                 535                 540
Gly Lys Ala Ser Asn Leu Glu Ser Glu Gly Tyr Glu Ser Tyr Leu Lys
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Asn Arg Leu
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<210> 62
<211> 571
<212> PRT
<213> Saccharomyces cereviseae

<400> 62

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            20                  25                  30
Asp Ala Glu Asn Ser Pro Ala Lys Gln Ile Ser Asn Ser Asn Asp His
        35                  40                  45
Val Asn Gly Ser Phe Ser Asn Pro Leu Asp Ile Glu Lys Leu Ala Glu
    50                  55                  60
Lys Cys Asp Val Leu Thr Ile Glu Ile Glu His Val Asp Val Pro Thr
65                  70                  75                  80
Leu Lys Asn Leu Gln Val Lys His Pro Lys Leu Lys Ile Tyr Pro Ser
                85                  90                  95
Pro Glu Thr Ile Arg Leu Ile Gln Asp Lys Tyr Ile Gln Lys Glu His
            100                 105                 110
Leu Ile Lys Asn Gly Ile Ala Val Thr Gln Ser Val Pro Val Glu Gln
        115                 120                 125
Ala Ser Glu Thr Ser Leu Leu Asn Val Gly Arg Asp Leu Gly Phe Pro
    130                 135                 140
Phe Val Leu Lys Ser Arg Thr Leu Ala Tyr Asp Gly Arg Gly Asn Phe
145                 150                 155                 160
Val Val Lys Asn Lys Glu Met Ile Pro Glu Ala Leu Glu Val Leu Lys
                165                 170                 175
Asp Arg Pro Leu Tyr Ala Glu Lys Trp Ala Pro Phe Thr Lys Glu Leu
            180                 185                 190
Ala Val Met Ile Val Arg Ser Val Asn Gly Leu Val Phe Ser Tyr Pro
        195                 200                 205
Ile Val Glu Thr Ile His Lys Asp Asn Ile Cys Asp Leu Cys Tyr Ala
    210                 215                 220
Pro Ala Arg Val Pro Asp Ser Val Gln Leu Lys Ala Lys Leu Leu Ala
225                 230                 235                 240
Glu Asn Ala Ile Lys Ser Phe Pro Gly Cys Gly Ile Phe Gly Val Glu
                245                 250                 255
Met Phe Tyr Leu Glu Thr Gly Glu Leu Leu Ile Asn Glu Ile Ala Pro
            260                 265                 270
Arg Pro His Asn Ser Gly His Tyr Thr Ile Asp Ala Cys Val Thr Ser
        275                 280                 285
Gln Phe Glu Ala His Leu Arg Ser Ile Leu Asp Leu Pro Met Pro Lys
    290                 295                 300
Asn Phe Thr Ser Phe Ser Thr Ile Thr Thr Asn Ala Ile Met Leu Asn
305                 310                 315                 320
Val Leu Gly Asp Lys His Thr Lys Asp Lys Glu Leu Glu Thr Cys Glu
                325                 330                 335
Arg Ala Leu Ala Thr Pro Gly Ser Ser Val Tyr Leu Tyr Gly Lys Glu
            340                 345                 350
Ser Arg Pro Asn Arg Lys Val Gly His Ile Asn Ile Ile Ala Ser Ser
        355                 360                 365
Met Ala Glu Cys Glu Gln Arg Leu Asn Tyr Ile Thr Gly Arg Thr Asp
    370                 375                 380
Ile Pro Ile Lys Ile Ser Val Ala Gln Lys Leu Asp Leu Glu Ala Met
385                 390                 395                 400
Val Lys Pro Leu Val Gly Ile Ile Met Gly Ser Asp Ser Asp Leu Pro
                405                 410                 415
Val Met Ser Ala Ala Cys Ala Val Leu Lys Asp Phe Gly Val Pro Phe
            420                 425                 430
Glu Val Thr Ile Val Ser Ala His Arg Thr Pro His Arg Met Ser Ala
        435                 440                 445
Tyr Ala Ile Ser Ala Ser Lys Arg Gly Ile Lys Thr Ile Ile Ala Gly
    450                 455                 460
Ala Gly Gly Ala Ala His Leu Pro Gly Met Val Ala Ala Met Thr Pro
465                 470                 475                 480
Leu Pro Val Ile Gly Val Pro Val Lys Gly Ser Cys Leu Asp Gly Val
                485                 490                 495
Asp Ser Leu His Ser Ile Val Gln Met Pro Arg Gly Val Pro Val Ala
            500                 505                 510
Thr Val Ala Ile Asn Asn Ser Thr Asn Ala Ala Leu Leu Ala Val Arg
        515                 520                 525
Leu Leu Gly Ala Tyr Asp Ser Ser Tyr Thr Thr Lys Met Glu Gln Phe
    530                 535                 540
Leu Leu Lys Gln Glu Glu Glu Val Leu Val Lys Ala Gln Lys Leu Glu
545                 550                 555                 560
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Thr Val Gly Tyr Glu Ala Tyr Leu Glu Asn Lys
565                 570
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