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MTTASTSQVRQNYHQDSEAAINRQINLELYASYVYLSMSYYFDRDDVALKNFAKYFL
HQSHEEREHAELMKLQNRGGRI FLQDIKKPDCDDWESGLNAMECALHLEKNVNQS
LLELHKLATDKNDPHLCDFIETHYLNEQVKAIKELGDHVTNLRKMGAPESGLAEYLF
DKHTLGDSDNES

FIG. 1

ATGGCTGATATC
GGATCCCATACATATGACGACCGCGTCCACCTCGCAGGTGCGCCAGAACTACCACCAG
GACTCAGAGGCCGCCATCAACCGCCAGATCAACCTGGAGCTCTACGCCTCCTACGTT
TACCTGTCCATGTCTTACTACTTTGACCGCGATGATGTGGCTTTGAAGAACTTTGCC
AAATACTTTCTTCACCAATCTCATGAGGAGAGGGAACATGCTGAGAACTGATGAAG
CTGCAGAACCAACGAGGTGGCCGAATCTTCCTTCAGGATATCAAGAAACCAGACTGT
GATGACTGGGAGAGCGGGCTGAATGCAATGGAGTGTGCATTACATTTGGAAAAAAAT
GTGAATCAGTCACTACTGGAAGTGCACAACTGGCCACTGACAAAAATGACCCCCAT
TTGTGTGACTTCATTGAGACACATTACCTGAATGAGCAGGTGAAAGCCATCAAAGAA
TTGGGTGACCACGTGACCAACTTGCGCAAGATGGGAGCGCCCGAATCTGGCTTGGCG
GAATATCTCTTTGACAAGCACACCCTGGGAGACAGTGATAATGAAAGCTAACCTAGG
CACCTCGAG

FIG. 2

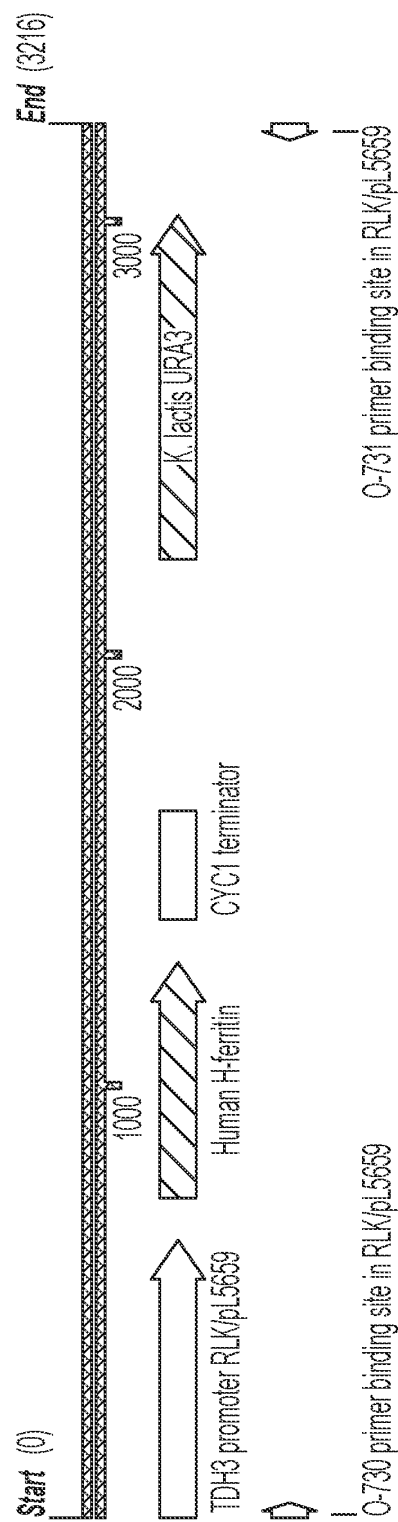


FIG. 3

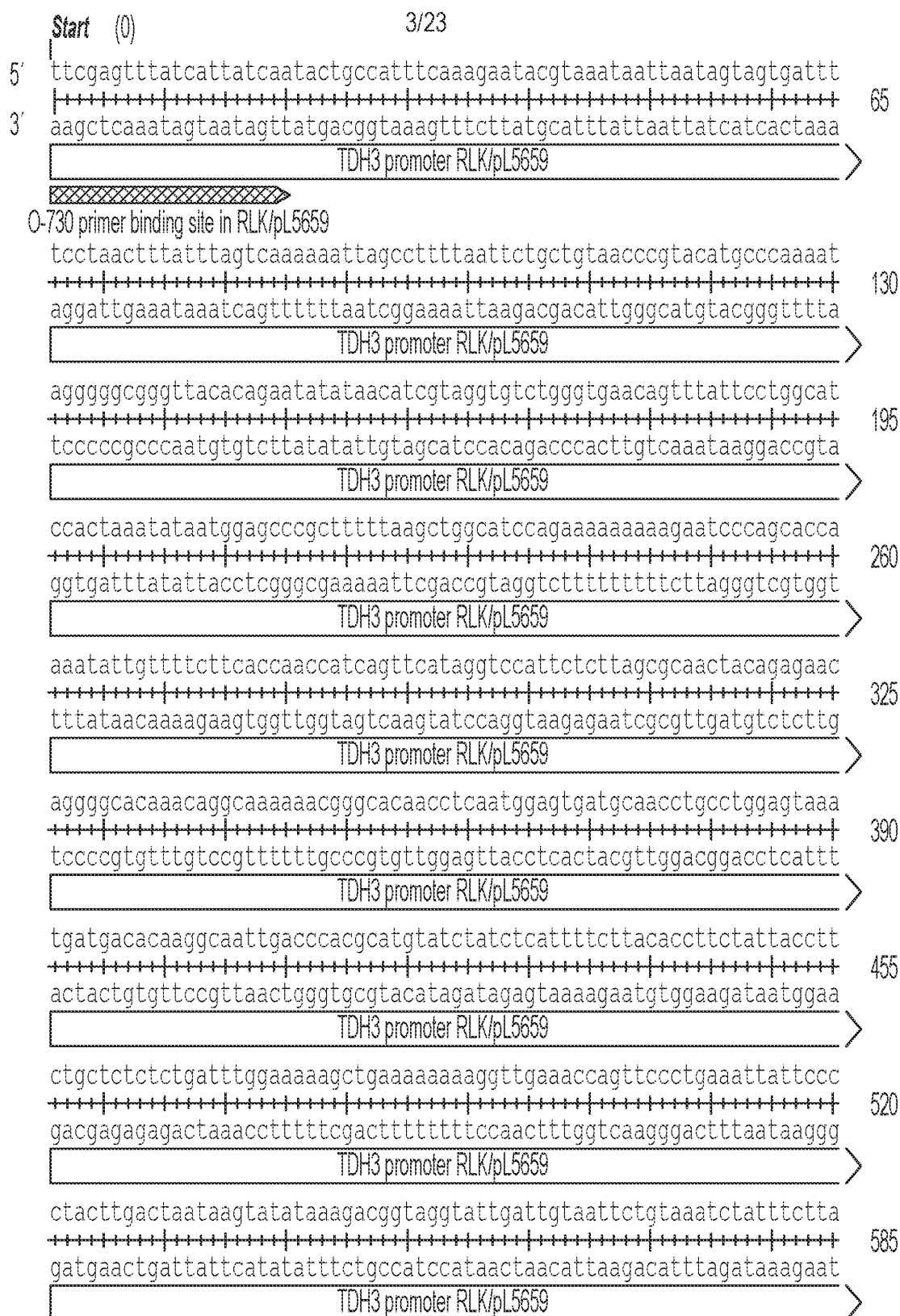


FIG. 4

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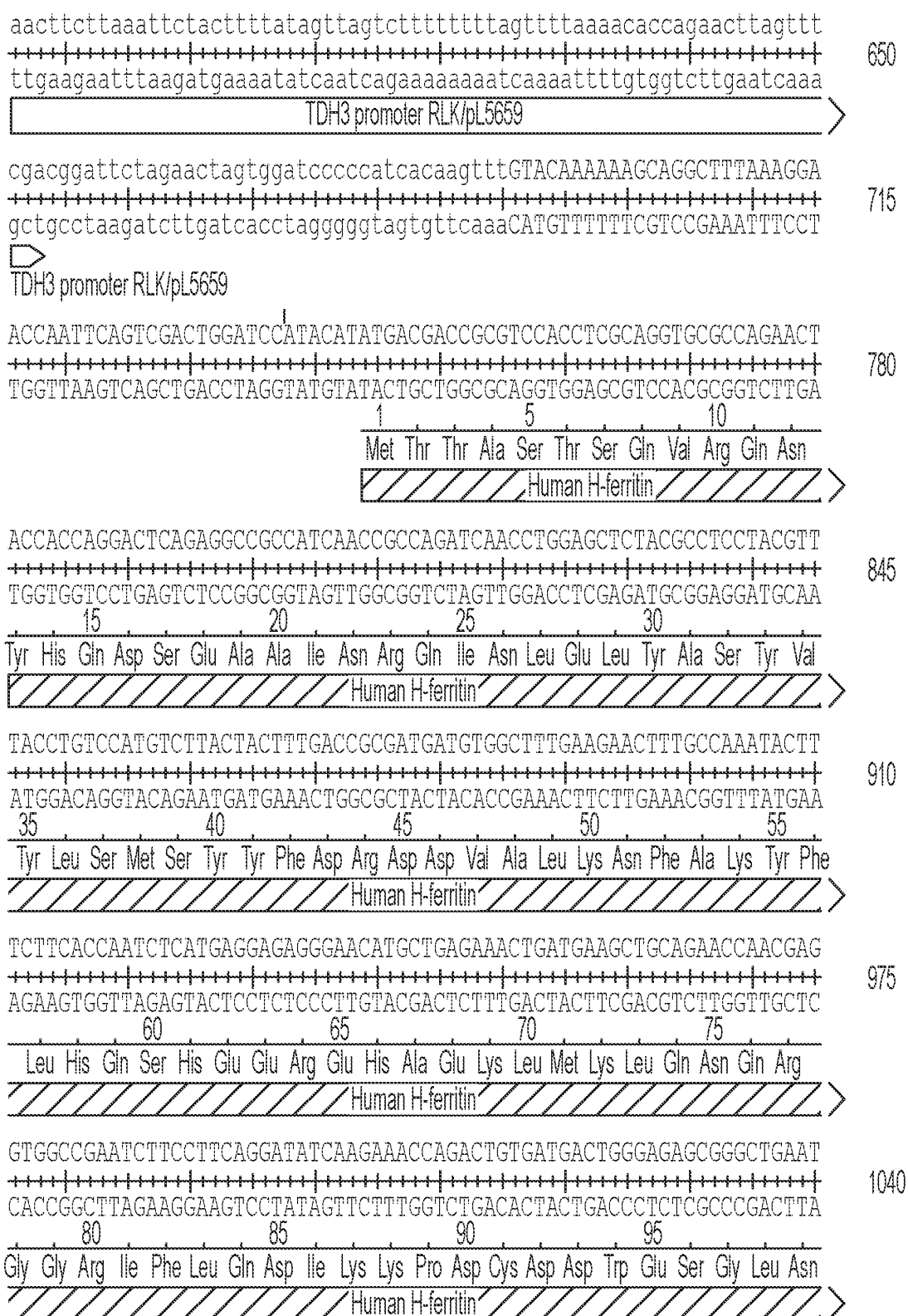


FIG. 4 Continued

GCAATGGAGTGTGCATTACATTTGGAAAAAATGTGAATCAGTCACTACTGGAAGTGCACAAACT
 100 105 110 115 120
 Ala Met Glu Cys Ala Leu His Leu Glu Lys Asn Val Asn Gln Ser Leu Leu Glu Leu His Lys Leu
 Human H-ferritin
 GGCCACTGACAAAAATGACCCCCATTGTGTGACTTCATTGAGACACATTACCTGAATGAGCAGG
 125 130 135 140
 Ala Thr Asp Lys Asn Asp Pro His Leu Cys Asp Phe Ile Glu Thr His Tyr Leu Asn Glu Gln
 Human H-ferritin
 TGAAAGCCATCAAAGAATTGGGTGACCACGTGACCAACTTGCGCAAGATGGGAGCGCCCGAATCT
 145 150 155 160
 Val Lys Ala Ile Lys Glu Leu Gly Asp His Val Thr Asn Leu Arg Lys Met Gly Ala Pro Glu Ser
 Human H-ferritin
 GGCTTGGCGGAATATCTCTTTGACAAGCACACCCTGGGAGACAGTGATAATGAAAGCTAACCTAG
 165 170 175 180
 Gly Leu Ala Glu Tyr Leu Phe Asp Lys His Thr Leu Gly Asp Ser Asp Asn Glu Ser
 Human H-ferritin
 GCACCTCGAGATATCTAGACCCAGCTTTCTTGTACaaagtggatgggctgcaggaattcgata
 1365 1400
 CGTGGAGCTCTATAGATCTGGGTGAAAGAACATGtttcaccactaccgcagctccttaagctat
 tcaagcttatcgataccgtcgacctcgagtcattgaattagttatgtcacgcttacattcacgcc
 agttcgaatagctatggcagctggagctcagtacattaatcaatacagtcggaatgtaagtgcgg
 CYC1 terminator
 ctccccccacatccgctctaaccgaaaaggaaggagttagacaacctgaagtctaggtccctatt
 1495
 gaggggggtgtaggcgagattggcttttccctcctcaatctgttgacttcagatccagggataa
 CYC1 terminator
 tatttttttatagttatgttagtattaagaacgttatttatatttcaaattttcttttttttct
 1560
 ataaaaaaaaatcaatacaatcataattcttgcaataaatataaagtttaaaagaaaaaaaaga
 CYC1 terminator

FIG. 4 Continued

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gtacagacgcgtgtacgcatgtaacattatactgaaaaccttgcttgagaaggttttgggacgct
 ++++++
 catgtctgcgcacatgcgtacattgtaatatgacttttggaaacgaactcttccaaaaccctgcga 1625

CYC1 terminator

cgaaggctttaatttgCGGCCGcataggccactagtggatctgatATCACCTAATAACTTCGTAT
 ++++++
 gcttccgaaattaaacGCCGGCgtatccggtgatcacctagactaTAGTGGATTATTGAAGCATA 1690

CYC1 terminator

AGCATACATTATACGAAGTTATATTAAGGGTTcTCGAgagctcggttttatttaggttctatcgag
 ++++++
 TCGTATGTAATATGCTTCAATATAATTCCCAAgAGCTctcgagcaaaataaatccaagatagctc 1755

gagaaaaagcgacaagaagagatagaccatggataaatgattatgttctaaacactcctcagaag
 ++++++
 ctctttttcgctgttcttctctatctggtacctatttactaataacaagatttgtgaggagtcttc 1820

ctcatcgaactgtcatcctgcgtgaagattaaaatccaacttagaaaatttcgagcttacggagac
 ++++++
 gagtagcttgacagtaggacgcacttctaatttttaggttgaatctttaagctcgaatgcctctg 1885

aatcatatgggagaagcaattggaagatagaaaaagggtactcggtacataaatatatgtgatcc
 ++++++
 ttagtataccctcttcgttaaccttctatctttttccatgagccatgtatttatatacactaag 1950

tgggtagaagatcggtctgcattggatgggtggaacgcatttttttacacacattacttgcctcg
 ++++++
 acccatcttctagccagacgtaacctaccaccattgcgtaaaaaaatgtgtgtaatgaacgggagc 2015

agcatcaaattggtggttattcgtggatctatatcacgtgatttgcttaagaattgtcggtcatgg
 ++++++
 tcgtagtttaccaccaataagcacctagatatagtgcactaaacgaattcttaacagcaagtacc 2080

tgacacttttagctttgacatgattaagctcatctcaattgatgttatctaaagtcatttcaact
 ++++++
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 ++++++
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gtcaattagttgcaccatgtccacaaaatcatataccagtagagctgagactcatgcaagtccgg
 ++++++
 cagttaatcaacgtggttacaggtgttttagtatatggtcatctcgactctgagtacgttcaggcc 2275

1 5 10 15
 Met Ser Thr Lys Ser Tyr Thr Ser Arg Ala Glu Thr His Ala Ser Pro
 // K. lactis URA3 //

FIG. 4 Continued

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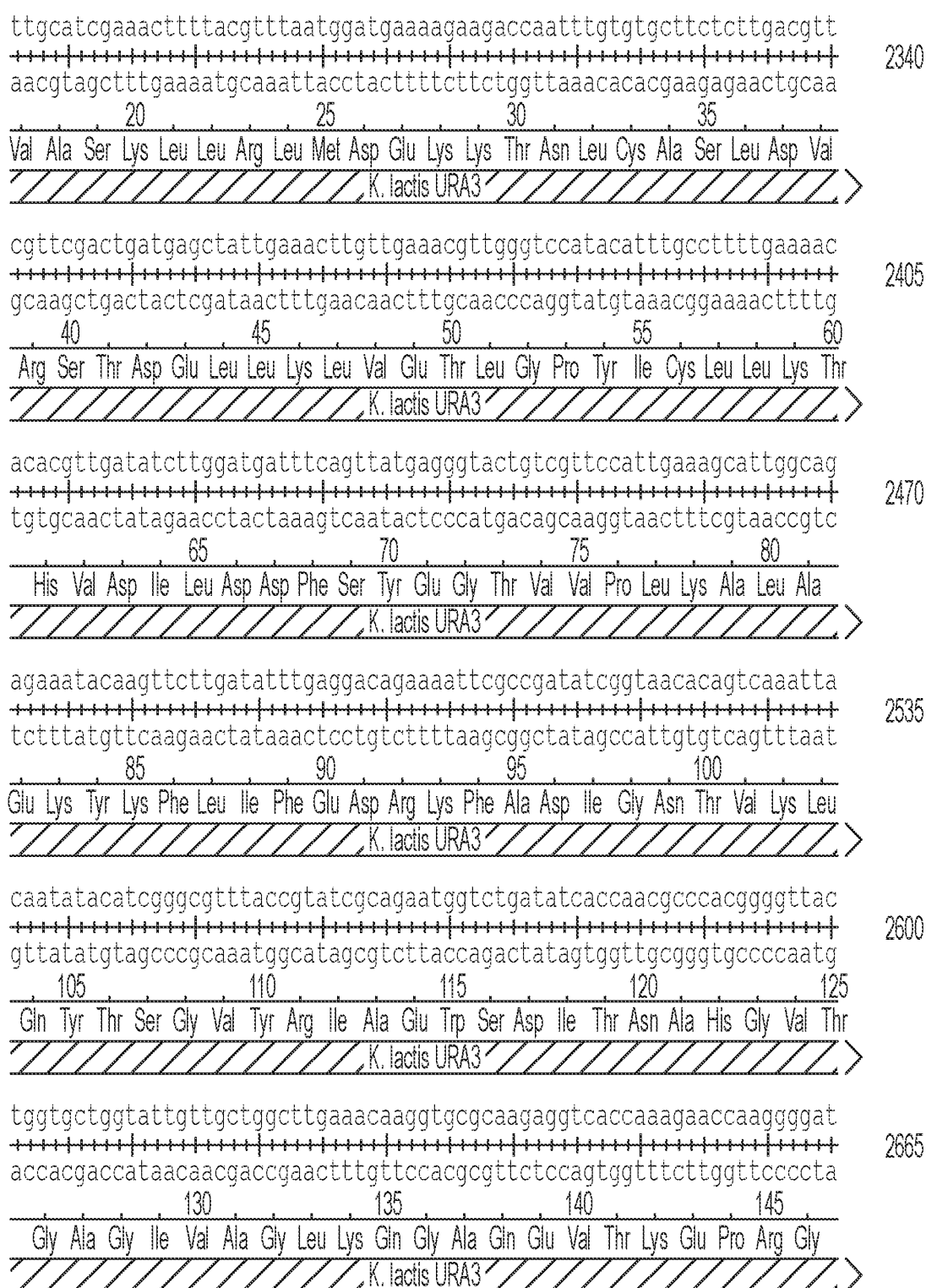


FIG. 4 Continued

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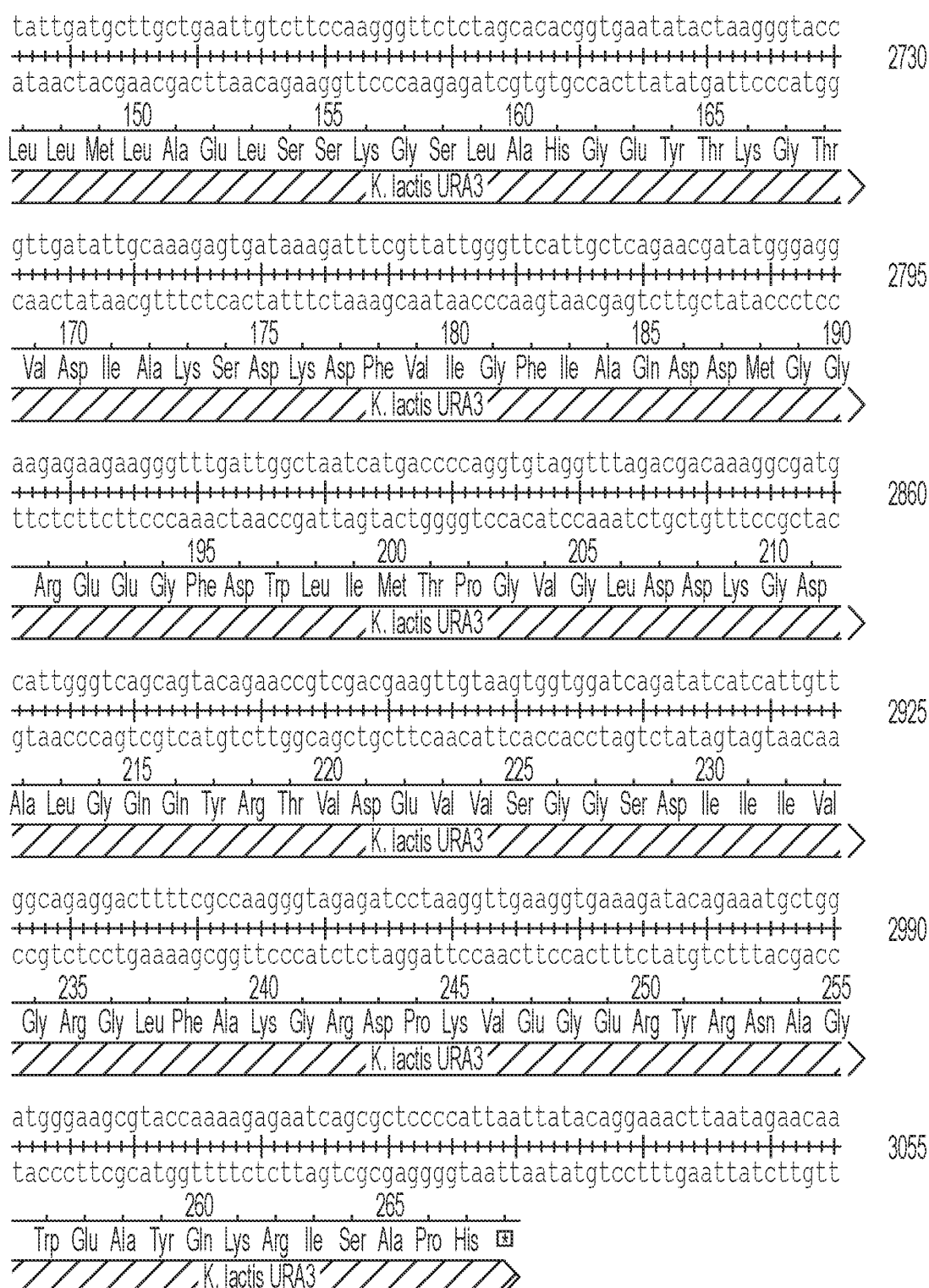


FIG. 4 Continued

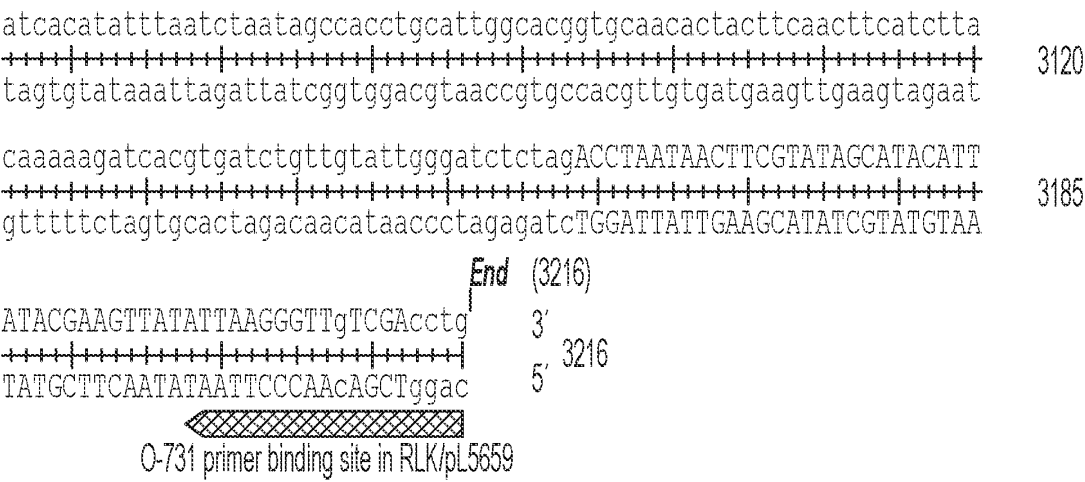
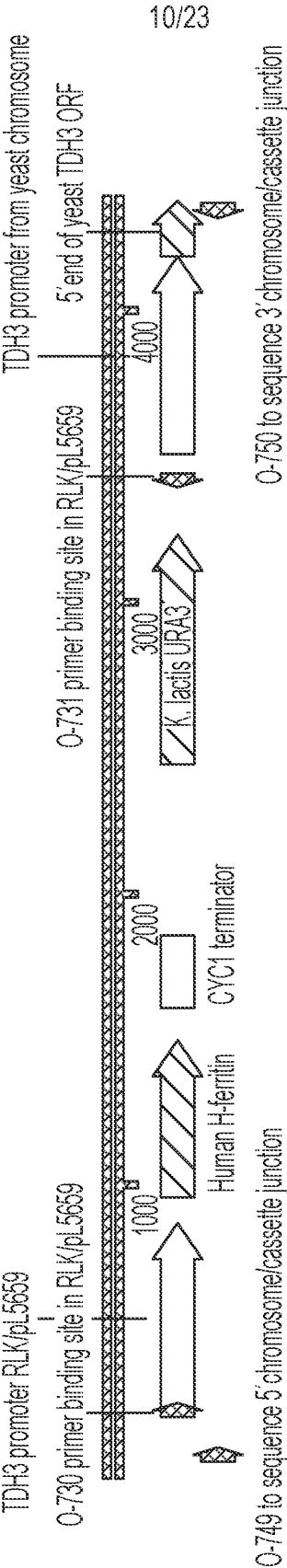


FIG. 4 Continued



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FIG. 5

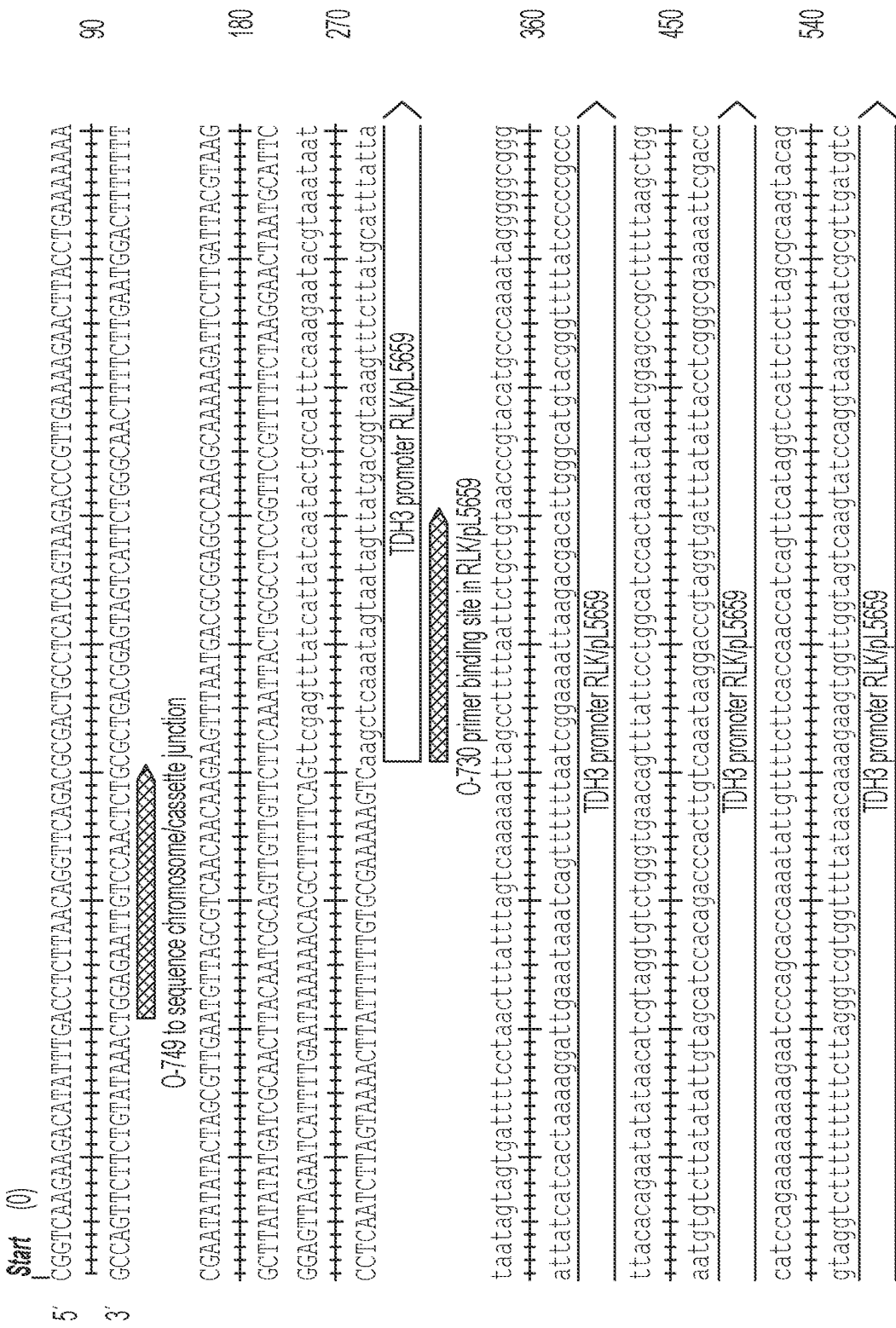


FIG. 6

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FIG. 6 Continued

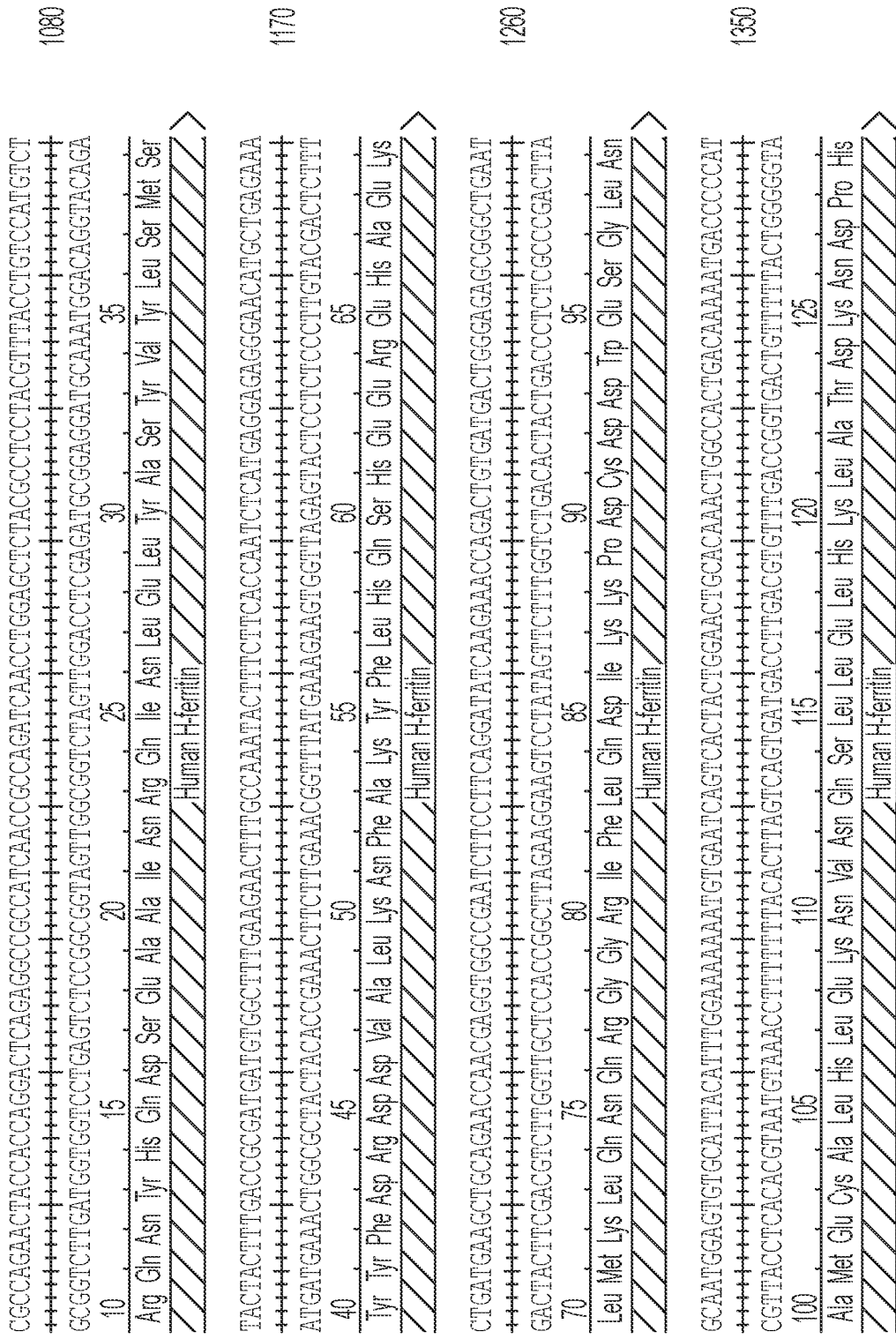


FIG. 6 Continued

1530

1620

91

cctatttatttttagtgattagtaataagaacgttatttatatttcaaattttcttttttctgtacagacgcgtgtaacgat
 gataataaaaaaatatcaatacaatcataattcttgcaataaataataaagtttaaaaaagaaaaagacatgtctgcgcacatgcgta
 CYC1 terminator

FIG. 6 Continued

1890

gtaacattatactgaaaacaccttgcttgagaagggttttggagcgctcgaaggctttaatttggccgcgcgcatagccactagtggtatctgat
+-----+
cattgtaatatgacttttggaaacgaactcttccaaaacccctggagcttccgaaaattaaacGCCGGCgtatccggtgatcacctagacta
+-----+
CYC1 terminator

1980

ATCACCTAATAACTTCGTATAGCATACATTATACGAAGTTATATTAAAGGTTcTCGAgagctcggtttatttaggtttatatcgaggagaa
+-----+
TAGTGGATTATTGAAGCATATCGTATGTAATATGCTTCAATATAATTCCCAAgAGCTctcgagcaaaaataatccaagatagctcctctt
+-----+

2070

aaagcgacaagaagagatagaccatggataaatgattatgttctaacaactcctcagaagctcatcgaactgtcctcctgcgtgaagatt
+-----+
tttcgctgttcttctctatctgtgtacctatttactaataacaagatttgtgaggagtcttcgagtagcttgacagtaggacgcacttcttaa
+-----+

2160

aaaatccaacttagaaaatttcgagcttacggagacaatcatatgggagaagcaattggagaagatagaaaaaagggtactcggtaacataaata
+-----+
ttttaggttgaatctttaagctcgaatgcctctgttagtataccctcttcggttaaccttctatcttttttccatgagccatgtatttat
+-----+

2250

tatgtattctgggtagaagatcggctctgcattggatgggtgtaacgcatttttttacacacattacttgcctcgagcatcaaatggtgg
+-----+
atacactaagaccatcttctagccagacgtaacctaccaccattgcgtaaaaaatgtgtgtaatgaacggagcgtcgtagtttaccacc
+-----+

2340

ttattcgtggatctatatatcactgatttgccttaagaattgtcgttcattggtgacacttttagctttgacatgattaagctcatctcaatt
+-----+
aataagcacctagatatagtgcaactaaacgaattctttaacagcaagtaccactgtgaaaatcgaaaactgtactaattcagtagagtttaa
+-----+

2430

gatgttatctaaagtcatttcaactatctaaagatgtggttgattggggccattttgtgaaagccagtagccagcgtcaatacactccc
+-----+
ctacaatagatttcagtaaagttgatagattctacaccacactaacccggtaaaacacttccggtcatgcggtcgcagttatgtgaggg
+-----+

FIG. 6 Continued

g t c a a t t a g t t g c a c c a t g t c c a c a a a t c a t a t a c c a g t a g a c t g a g a c t c a t g c a a g t c o g g t t g c a t o g a a a c t t t t a c g t t t a a t
 c a g t t a a t c a a c g t g t t a c a g g t g t t t a g t a t a t g g t c a t c t c g a c t c t g a g t a c t t c a g g c c a a c g t a g t t t g a a a a t g c a a a t t a
 1 5 10 15 20 25
 Met Ser Thr Lys Ser Tyr Thr Ser Arg Ala Glu Thr His Ala Ser Pro Val Ala Ser Lys Leu Arg Leu Met
 K. lactis URA3

ggatgaaagaagaccaatttggtgtcttctctttgacgttcttgactgatgagctattgaaacttgttgaaacgttgggtccatacat
 cctacttttcttctgttaaacacagaagagaactgcaagcaagctgactactcgataaacttgaacaacttgcacccaggtagtga
 30 35 40 45 50 55
 Asp Glu Lys Lys Thr Asn Leu Cys Ala Ser Leu Asp Val Arg Ser Thr Asp Glu Leu Leu Lys Leu Val Glu Thr Leu Gly Pro Tyr Ile
 K. lactis URA3

tttgcctttgaaaacacacggttgatatcttggatgatttcagttatgagggtactgctgtcttccattgaaagcattggcagagaaatacaa
aacggaacacttttgtgtgcaactatagaacctactaaagtcaatactactcccatgacagcaaggtaaccttctgtaaccgtctctttatgtt

Cys Leu Leu Lys Thr His Val Asp Ile Leu Asp Asp Phe Ser Tyr Glu Gly Thr Val Val Pro Leu Lys Ala Leu Ala Glu Lys Tyr Lys

K. lactis URA3

gttcttgatatttgaggacagaaaattgccgatatcggtaacacagtcacaaattacaatatcatcgggcggtttaccggtatcgcagaatg
caagaactataaactcctgtcttttaagcggctatagccattgtgcagtttaatgttatgtagcccgcaaatggcattagcgtcttac
Phe Leu Ile Phe Glu Asp Arg Lys Phe Ala Asp Ile Gly Asn Thr Val Lys Leu Gln Tyr Thr Ser Gly Val Tyr Arg Ile Ala Glu Trp
K. lactis URA3

FIG. 6 Continued

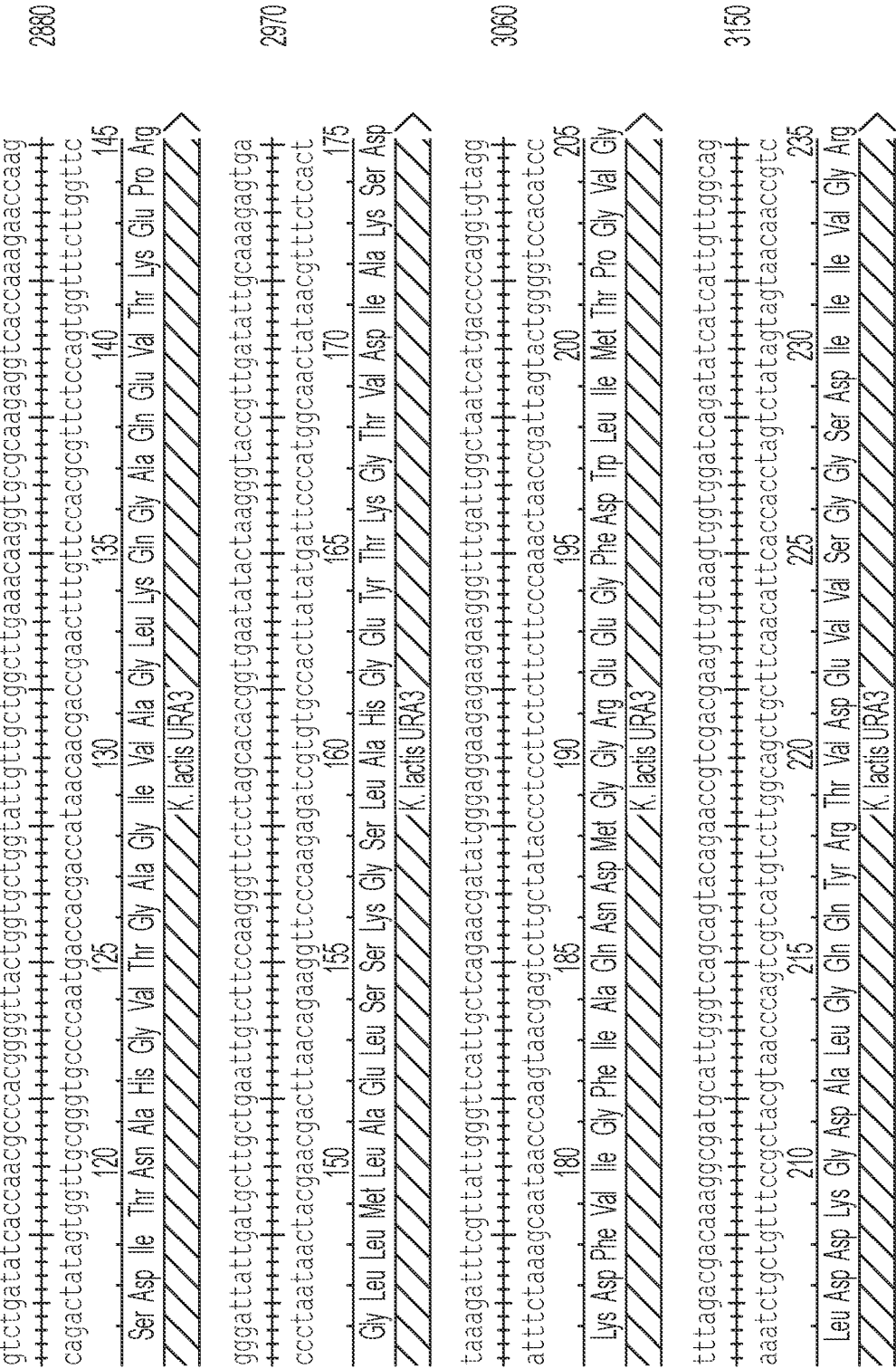


FIG. 6 Continued

FIG. 6 Continued

0-750 to PCR Fertilin::URA3 insert in P3190

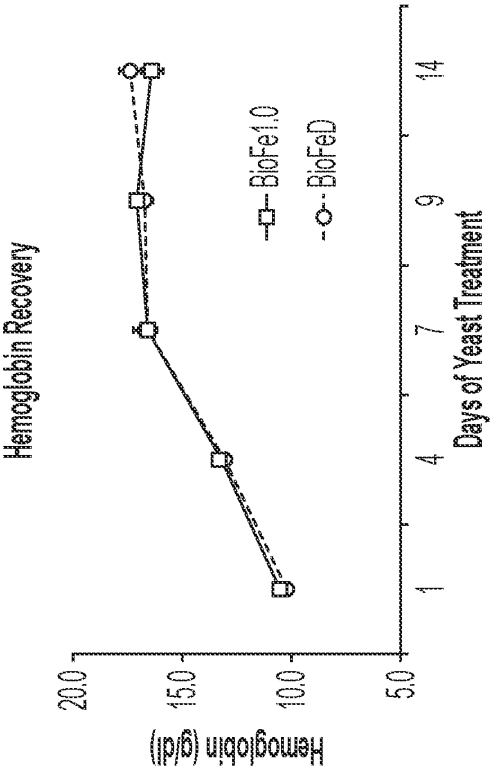


FIG. 7

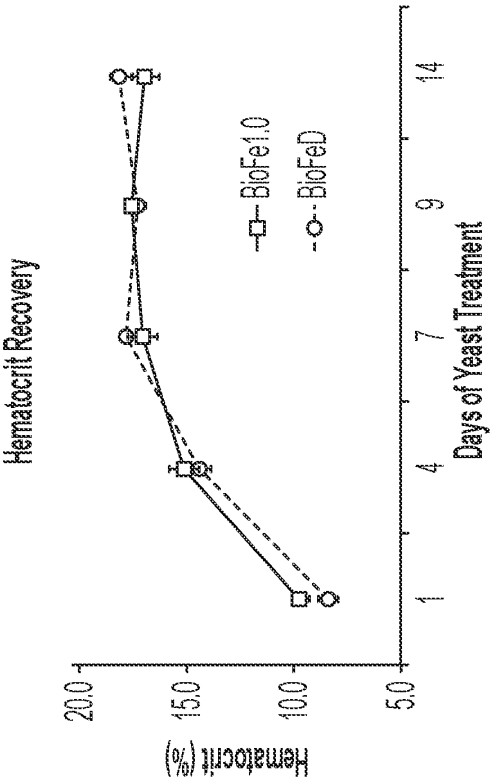


FIG. 8

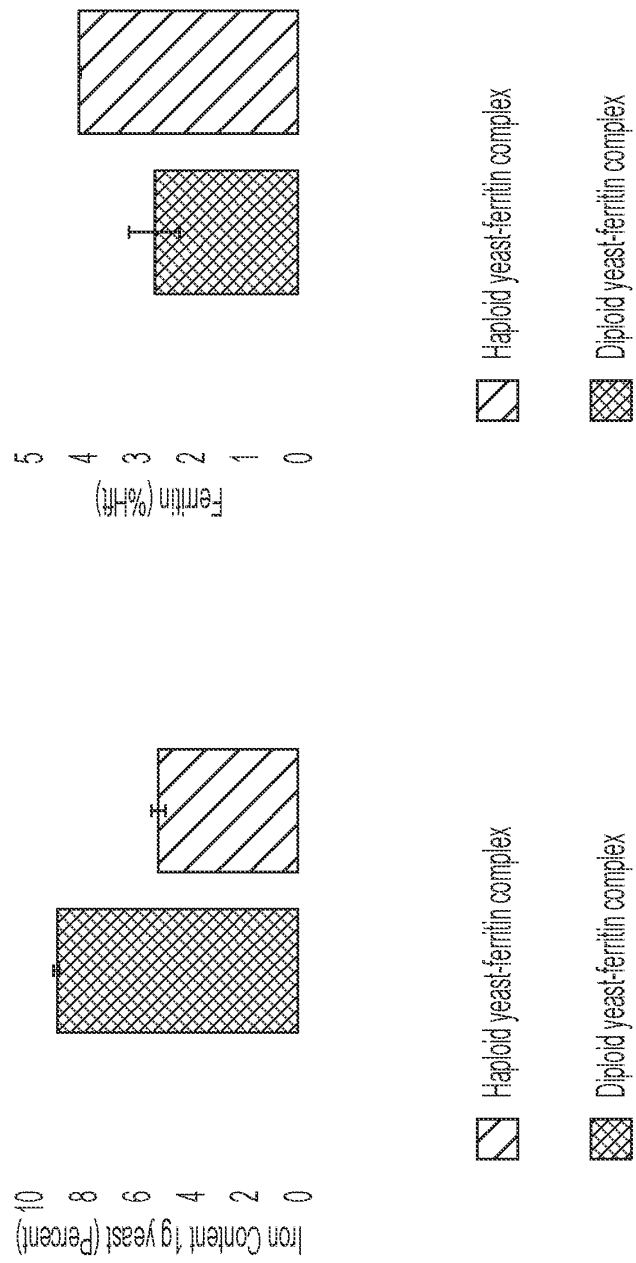


FIG. 9A

FIG. 9B