

PhoenixTemp2242.tmp.txt
SEQUENCE LISTING

<110> METABOLIC EXPLORER

<120> New micro-organisms for the production of acetol obtained by a combination of evolution and rational design

<130> D25299

<150> PCT/IB2007/001682
<151> 2007-03-23

<160> 52

<170> PatentIn version 3.3

<210> 1
<211> 20
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide

<400> 1
ggtgatgata gttatcgccg 20

<210> 2
<211> 20
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide

<400> 2
cgtgccatcg acagcagtcc 20

<210> 3
<211> 30
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide

<400> 3
agacattaaa aatatacgtg cagctaccg 30

<210> 4
<211> 30
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide

<400> 4
gtgaaagctg acaacccttt tgatctttta 30

<210> 5
<211> 22
<212> DNA
<213> Artificial

<220>
 <223> oligonucleotide
 <400> 5
 ggctcattgc accaccatcc ag 22

<210> 6
 <211> 24
 <212> DNA
 <213> Artificial
 <220>
 <223> oligonucleotide
 <400> 6
 gaaaagacgc gctgacaata cgcc 24

<210> 7
 <211> 20
 <212> DNA
 <213> Artificial
 <220>
 <223> oligonucleotide
 <400> 7
 gccatcagca ggcttagccg 20

<210> 8
 <211> 23
 <212> DNA
 <213> Artificial
 <220>
 <223> oligonucleotide
 <400> 8
 ggggtattgtg gcatgtttaa ccg 23

<210> 9
 <211> 31
 <212> DNA
 <213> Artificial
 <220>
 <223> oligonucleotide
 <400> 9
 gaagtgtcg atgccgggat tgaagaatgg g 31

<210> 10
 <211> 31
 <212> DNA
 <213> Artificial
 <220>
 <223> oligonucleotide
 <400> 10
 gggttacgtt tcagtgaggc gcgttctgcg g 31

<210> 11
 <211> 31

<212> DNA
 <213> Artificial
 <220>
 <223> oligonucleotide
 <400> 11
 tgcagcggcg cacgatggcg acgttccgcc g 31

<210> 12
 <211> 31
 <212> DNA
 <213> Artificial
 <220>
 <223> oligonucleotide
 <400> 12
 cacgatgacg accattcatg cctatactgg c 31

<210> 13
 <211> 40
 <212> DNA
 <213> Artificial
 <220>
 <223> oligonucleotide
 <400> 13
 catatttccc tcaaagaata taaaaaagaa caattaacgc 40

<210> 14
 <211> 31
 <212> DNA
 <213> Artificial
 <220>
 <223> oligonucleotide
 <400> 14
 tatgttcacg cgatggcgca ccagctgggc g 31

<210> 15
 <211> 24
 <212> DNA
 <213> Artificial
 <220>
 <223> oligonucleotide
 <400> 15
 ccccggaatc agaggaatag tccc 24

<210> 16
 <211> 29
 <212> DNA
 <213> Artificial
 <220>
 <223> oligonucleotide
 <400> 16
 gggtagactc cattactgag gcgtgggcg 29

PhoenixTemp2242.tmp.txt

<210> 17	
<211> 20	
<212> DNA	
<213> Artificial	
<220>	
<223> oligonucleotide	
<400> 17	
gccatcagca ggcttagcgc	20
<210> 18	
<211> 23	
<212> DNA	
<213> Artificial	
<220>	
<223> oligonucleotide	
<400> 18	
gggtattgtg gcatgtttaa ccg	23
<210> 19	
<211> 21	
<212> DNA	
<213> Artificial	
<220>	
<223> oligonucleotide	
<400> 19	
catttccggt ggtgcgattg c	21
<210> 20	
<211> 29	
<212> DNA	
<213> Artificial	
<220>	
<223> oligonucleotide	
<400> 20	
gccacagccg gaatcatact tggtttggg	29
<210> 21	
<211> 29	
<212> DNA	
<213> Artificial	
<220>	
<223> oligonucleotide	
<400> 21	
cgtcaacacc aacttcgtcc catttcagg	29
<210> 22	
<211> 23	
<212> DNA	
<213> Artificial	
<220>	
<223> oligonucleotide	

<400> 22
 ggcaattacc ctcgacgtac cgg 23

<210> 23
 <211> 25
 <212> DNA
 <213> Artificial

<220>
 <223> oligonucleotide

<400> 23
 ccgatggatg atctgttaga ggcgg 25

<210> 24
 <211> 22
 <212> DNA
 <213> Artificial

<220>
 <223> oligonucleotide

<400> 24
 gcgtaacctt ttccctggaa cg 22

<210> 25
 <211> 24
 <212> DNA
 <213> Artificial

<220>
 <223> oligonucleotide

<400> 25
 gcgttgctgg agcaacctgc cagc 24

<210> 26
 <211> 35
 <212> DNA
 <213> Artificial

<220>
 <223> oligonucleotide

<400> 26
 gcctggattt gtaccacggt tggatggaacg gcggg 35

<210> 27
 <211> 24
 <212> DNA
 <213> Artificial

<220>
 <223> oligonucleotide

<400> 27
 cacgcatatt cccattgcc gggg 24

<210> 28
 <211> 20
 <212> DNA
 <213> Artificial

PhoenixTemp2242.tmp.txt

<220>
 <223> oligonucleotide
 <400> 28
 gcatgggtaa acttaaggcg 20

<210> 29
 <211> 20
 <212> DNA
 <213> Artificial

<220>
 <223> oligonucleotide
 <400> 29
 taatcaccaa cgtatcgggc 20

<210> 30
 <211> 21
 <212> DNA
 <213> Artificial

<220>
 <223> oligonucleotide
 <400> 30
 cgcggttg tcgggtaacg g 21

<210> 31
 <211> 24
 <212> DNA
 <213> Artificial

<220>
 <223> oligonucleotide
 <400> 31
 tcgggtatt taaccgtag tgcc 24

<210> 32
 <211> 100
 <212> DNA
 <213> Artificial

<220>
 <223> oligonucleotide
 <400> 32
 gaaactcgcc gtttatagca caaacagta cgacaagaag tacctgcaac aggtgaacga 60
 gtcctttggc tttagctgg ttaggctgg agctgcttcg 100

<210> 33
 <211> 101
 <212> DNA
 <213> Artificial

<220>
 <223> oligonucleotide
 <400> 33
 ttaaccagt tcgttcgggc aggtttcgcc tttttccaga ttgcttaagt ttgcagcgt 60
 agtctgagaa atactggtca gcatatgaat atcctcctta g 101

PhoenixTemp2242.tmp.txt

<210> 34
<211> 124
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide

<400> 34
ggggctgacc ttcgctgttg aaccgattaa gctggcgcta tctgaatcgc ttgaagggtt 60
gaataaatga tcacactggc tcaccttcgg gtgggccttt ctgccatatg aatatcctcc 120
ttag 124

<210> 35
<211> 106
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide

<400> 35
gcgaataaag gaagatggcc gccccgcagg gcagcaggtc tgtgaaacag tatagagatt 60
catcggcaca aaggctttgc tttttgtgta ggctggagct gcttcg 106

<210> 36
<211> 100
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide

<400> 36
agtcatatat tccaccagct atttgtagt gaataaaagc cacacattat tcgagccgga 60
tgattaatag tcaacagctc tgtaggctgg agctgcttcg 100

<210> 37
<211> 79
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide

<400> 37
gctcacatta cgtgactgat tctaacaaaa cattaacacc aactggcaaa attttgtccc 60
atatgaatat cctccttag 79

<210> 38
<211> 101
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide

<400> 38

PhoenixTemp2242.tmp.txt

cgcggcgggt gccaacgttg tacgtatgaa cttttctcac ggctcgctg aagatcaca 60
aatgcgcgcg gataaagttc gtgtaggctg gagctgcttc g 101

<210> 39
<211> 101
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide

<400> 39
cgccgcatcc ggcaacgtac ttactctacc gttaaaatac gcgtgggtatt agtagaaccc 60
acggtactca tcacgtcgcc ccatatgaat atcctcctta g 101

<210> 40
<211> 98
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide

<400> 40
cccattcttc tcaacttaaa gactaagact gtcattgaaa agaccaaatt tgtttgacc 60
atcggaccga aaaccgaatg taggctggag ctgcttcg 98

<210> 41
<211> 99
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide

<400> 41
ggacgtgaac agatgcggtg ttagtagtgc cgctcggtac cagtgcacca gaaaccataa 60
ctacaacgtc acctttgtgc atatgaatat cctccttag 99

<210> 42
<211> 101
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide

<400> 42
gttattccca ctcttgacagg aaacgctgac cgtactggtc ggctaccagc agagcggcgt 60
aaacctgatc tggcgtcgcg gtgtaggctg gagctgcttc g 101

<210> 43
<211> 100
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide

PhoenixTemp2242.tmp.txt

<400> 43
atggaccgca ttattcaatc accgggtaaa tacatccagg gcgctgatgt gattaatcgt 60
ctgggcgaat acctgaagcc catatgaata tcctccttag 100

<210> 44
<211> 100
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide

<400> 44
cgagtaagtt agtactgggt ctgaactgcg gtagttcttc actgaaattt gccatcatcg 60
atgcagtaaa tgggtgaagag tgtaggctgg agctgcttcg 100

<210> 45
<211> 97
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide

<400> 45
gctgctgtgc agactgaatc gcagtcagcg cgatggtgta gacgatatcg tcaaccagtg 60
cgccacggga caggtcgcat atgaatatcc tccttag 97

<210> 46
<211> 99
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide

<400> 46
ccttagccag tttgttttcg ccagttcgat cacttcatca ccgcgtccgc tgatgattgc 60
gcgcagcata tacaggctgc atatgaatat cctccttag 99

<210> 47
<211> 102
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide

<400> 47
cggttgcagc ttatatcgcc aaaacactcg aatcggcagg ggtgaaacgc atctggggag 60
tcacaggcga ctctctgaac ggtgtaggct ggagctgctt cg 102

<210> 48
<211> 41
<212> DNA
<213> Artificial

<220>
<223> Synthetic promoter

PhoenixTemp2242.tmp.txt

<400> 48
gagctgttga cgattaatca tccggctcga ataatgtgtg g 41

<210> 49
<211> 65
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide

<400> 49
ccttttattc actaacaat agctggtgga atatatgtcc aacaatggct cgtcaccgct 60
ggtgc 65

<210> 50
<211> 43
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide

<400> 50
aatcgcaagc ttgaatccgg ttatttcttc agttcagcca ggc 43

<210> 51
<211> 65
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide

<400> 51
gcaccagcgg tgacgagcca ttgttggaaca tatattccac cagctatttg ttagtgaata 60
aaagg 65

<210> 52
<211> 33
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide

<400> 52
acgtcccggg caagcccaa ggaagagtga ggc 33