

SEQUENCE LISTING

<110> Biofidelity Limited

<120> IMPROVED POLYNUCLEOTIDE SEQUENCE DETECTION METHOD

<130> P31404W02

<150> EP18184575.1

<151> 2018-07-19

<150> PCT/EP2018/083227

<151> 2018-10-30

<160> 30

<170> PatentIn version 3.5

<210> 1

<211> 94

<212> DNA

<213> Artificial Sequence

<220>

<223> example 1 a single-stranded first oligonucleotide 1

<400> 1

cgctcgatgt atacgctcgg accactcgta cctcgaactg tcgtagtat ttttatatgt 60

agtttctgaa gtagatatgg cagcacataa tgac 94

<210> 2

<211> 70

<212> DNA

<213> Artificial Sequence

<220>

<223> example 1 a single-stranded oligonucleotide 2

<400> 2

agtacaaata tgtcattatg tgctgccata tctacttcag aaactacata taaaaatact 60

aactttaagg 70

<210> 3

<211> 70

<212> DNA

<213> Artificial Sequence

<220>

<223> example 1 a single-stranded oligonucleotide 3

<400> 3
agtacaaata tctcattatg tgctgccata tctacttcag aaactacata taaaaatact 60
aactttaagg 70

<210> 4
<211> 70
<212> DNA
<213> Artificial Sequence

<220>
<223> example 1 a single-stranded oligonucleotide 4

<400> 4
agtacaaata tgtcattatg agctgccata tctacttcag aaactacata taaaaatact 60
aactttaagg 70

<210> 5
<211> 70
<212> DNA
<213> Artificial Sequence

<220>
<223> example 1 a single-stranded oligonucleotide 5

<400> 5
agtacaaata tgtcattatg tgctgccata actacttcag aaactacata taaaaatact 60
aactttaagg 70

<210> 6
<211> 70
<212> DNA
<213> Artificial Sequence

<220>
<223> example 1 a single-stranded oligonucleotide 6

<400> 6
agtacaaata tgtcattatg tgctgccata tctacttcag taactacata taaaaatact 60
aactttaagg 70

<210> 7
<211> 94
<212> DNA
<213> Artificial Sequence

<220>

<223> example 2 a single-stranded oligonucleotide 1

<220>

<221> C at position 1 has a 5' phosphate group

<222> 1

<400> 7

cgctcgatgt atacgctcgg accactcgta cctcgaactg tcgttagtat ttttatatgt 60

agtttctgaa gtagatatgg cagcacataa tgac 94

<210> 8

<211> 132

<212> DNA

<213> Artificial Sequence

<220>

<223> example 2 a single-stranded oligonucleotide 2

<220>

<221> A at position 1 has a 5' phosphate group

<222> 1

<400> 8

atgttcgatg aggcacgata tagatgtacg ctttgacata cgctttgaca atacttgagc 60

agtcggcaga tataggatgt tgcaagctcc gtgagtccca caaaccaata acctcgtttt 120

ttatatgtag tt 132

<210> 9

<211> 57

<212> DNA

<213> Artificial Sequence

<220>

<223> example 2 a single-stranded oligonucleotide 3

<220>

<221> C at position 57 is a 3'dideoxycytosine

<222> 57

<400> 9

tatcgtgcct catcgaacat aactacatat aaaaaacgag gttattgggtt tgtggcc 57

<210> 10

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> example 3 a single-stranded oligonucleotide primer 1

<400> 10

tgctcaagta ttgtcaaagc

20

<210> 11

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> example 3 a single-stranded oligonucleotide primer 2

<400> 11

cggcagatat aggatgttgc

20

<210> 12

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> example 4 a single-stranded oligonucleotide 1

<220>

<221> T at position 26 is a deoxythymidine labelled with Atto 594 dye

<222> 26

<220>

<221> T at position 27 is a deoxythymidine labelled with Atto 594 dye

<222> 27

<220>

<221> T at position 30 is a deoxythymidine labelled with BHQ-2 quencher

<222> 30

<400> 12

atgacctcgt aagccagtgt cagagtttttttc cagccgt

39

<210> 13

<211> 51

<212> DNA

<213> Artificial Sequence

<220>

<223> example 4 a single-stranded oligonucleotide 2

<220>

<221> T at position 51 is an inverted 3'dT

<222> 51

<400> 13
ttcacacggc tggaaaaaaa ctctgacact ggcttacgag gtcattagatt 51

<210> 14
<211> 78
<212> DNA
<213> Artificial Sequence

<220>
<223> example 5 T790M

<220>
<221> A at position 1 has a 5' phosphate group
<222> 1

<400> 14
atgttcgatg agctttgaca atacttgagc acggcagata taggatgttg cgaagggcat 60
gagctgcatg atgagctg 78

<210> 15
<211> 69
<212> DNA
<213> Artificial Sequence

<220>
<223> example 5 C797S

<220>
<221> A at position 1 has a 5' phosphate group
<222> 1

<400> 15
atgttcgatg agctttgaca atacttgaag ctcgcagata taggatgttg cgatagtcca 60
ggaggctgc 69

<210> 16
<211> 73
<212> DNA
<213> Artificial Sequence

<220>
<223> example 5 L861Q

<220>
<221> A at position 1 has a 5' phosphate group
<222> 1

<400> 16
atgttcgatg agctttgaca atacttgatc gatgcagata taggatgttg cgatccgcac 60

ccagctgttt ggc 73

<210> 17
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> example 5 T790M splint oligo

<400> 17
tgtcaaagct catcgaacat gcccttcgca acatct 36

<210> 18
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> example 5 C797S splint oligo

<400> 18
tgtcaaagct catcgaacat tcctggacta tcgcat 36

<210> 19
<211> 34
<212> DNA
<213> Artificial Sequence

<220>
<223> example 5 L861Q splint oligo

<400> 19
agctcatcga acatctgggt gcggatcgca acaa 34

<210> 20
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> example 5 T790M primer

<400> 20
acatcctata tctgccgt 18

<210> 21
<211> 20

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> example 5 C797S primer

 <400> 21
 catcgaacat tcctggacta 20

 <210> 22
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> example 5 L861Q primer

 <400> 22
 tcatcgaaca tctgggtgcg 20

 <210> 23
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> example 5 universal reverse primer

 <400> 23
 atgttcgatg agctttgaca 20

 <210> 24
 <211> 80
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> example 8 synthetic oligonucleotide 1

 <400> 24
 ccgcagcatg tcaagatcac agattttggg ctggccaaac tgctgggtgc ggaagagaaa 60

 gaataccatg cagaaggagg 80

 <210> 25
 <211> 80
 <212> DNA
 <213> Artificial Sequence

 <220>

<223> example 8 synthetic 'mutant' oligonucleotide 2

<400> 25

ccgcagcatg tcaagatcac agattttggg cgggccaaac tgctgggtgc ggaagagaaa 60

gaataccatg cagaaggagg 80

<210> 26

<211> 71

<212> DNA

<213> Artificial Sequence

<220>

<223> example 8 assay probe oligonucleotide 3

<220>

<221> A at position 1 has a 5' phosphate group

<222> 1

<400> 26

atgttcgatg agctttgaca atacttgatc gatgcagata taggatgttg cgacagtttg 60

gcccgcccaa a 71

<210> 27

<211> 71

<212> DNA

<213> Artificial Sequence

<220>

<223> example 8 assay probe oligonucleotide 4

<220>

<221> A at position 1 has a 5' phosphate group

<222> 1

<400> 27

atgttcgatg agctttgaca atacttgatc gatgcagata taggatgttg cgacagtttg 60

gccggcccaa a 71

<210> 28

<211> 36

<212> DNA

<213> Artificial Sequence

<220>

<223> example 8 splint oligonucleotide 5

<400> 28

tgtcaaagct catcgaacat gccaaactgt cgcaag 36

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

<220>
<223> example 8 primer oligonucleotide 6

<400> 29
tcgcaacatc ctatatctgc 20

<210> 30
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> example 8 primer oligonucleotide 7

<400> 30
tgagctttga caatacttga 20