

SEQUENCE LISTING

<110> MITSUBISHI RAYON Co., LTD.

<120> Microarray for detection of mutations of beta-globin gene and the
method for detection of that

<130> PCT13-0016

<150> JP 2012-077394

<151> 2012-03-29

<160> 66

<170> PatentIn version 3.5

<210> 1

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> probe

<400> 1

ctgtggggca aggtgaacg

19

<210> 2

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> probe

<400> 2

ctgtggggct aggtgaacg

19

<210> 3
<211> 19
<212> DNA
<213> Artificial sequence

<220>
<223> probe

<220>
<221> misc_feature
<222> (11).. (11)
<223> n is inosine

<400> 3
ggcaaggatg ncgtggatg

19

<210> 4
<211> 19
<212> DNA
<213> artificial sequence

<220>
<223> probe

<220>
<221> misc_feature
<222> (11).. (11)
<223> n is inosine

<400> 4
ggctaggatg ncgtggatg

19

<210> 5
<211> 19
<212> DNA
<213> artificial sequence

<220>
<223> probe

<400> 5
tggtgaggcc ctgggcagg

19

<210> 6
<211> 19
<212> DNA
<213> artificial sequence

<220>
<223> probe

<400> 6
tggigaggcc cctgggcag

19

<210> 7
<211> 16
<212> DNA
<213> artificial sequence

<220>
<223> probe

<220>
<221> misc_feature
<222> (3).. (3)
<223> n is inosine

<400> 7

gtnaggccct gggcag

16

<210> 8

<211> 16

<212> DNA

<213> artificial sequence

<220>

<223> probe

<220>

<221> misc_feature

<222> (2).. (2)

<223> n is inosine

<400> 8

tnaggccct gggcag

16

<210> 9

<211> 19

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 9

tttggcaaag aattcaccc

19

<210> 10

<211> 19

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 10

tttggcaaac aattcaccc

19

<210> 11

<211> 22

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 11

ccatcacttt ggcaaagaat tc

22

<210> 12

<211> 22

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 12

ccatcacttt ggcaaacaat tc

22

<210> 13

<211> 19

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 13

accccaccag tgcaggctg

19

<210> 14

<211> 19

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 14

accccaccag ggcaggctg

19

<210> 15

<211> 21

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 15

cagtgcaggc tgcctatcag a

21

<210> 16

<211> 21

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 16

cagggcaggc tgcctatcag a

21

<210> 17

<211> 19

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 17

aaccaccag tgcaggcaa

19

<210> 18

<211> 19

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 18

aaccaccag ggcaggcaa

19

<210> 19

<211> 1736

<212> DNA

<213> Homo sapiens

<400> 19

aaticctaag ccagtgccag aagagccaag gacaggtacg gctgtcatca cttagacctc

60

accctgtgga gccacacctt agggttggcc aatctactcc caggagcagg gagggcagga

120

8caagagctg gacataaag tcaggacaga gccatcatt gcttcagaca 180
caactgigt cactagcaac ctcaaacaga caccatggtg caticgacac ctgagagagaa 240
gtcgcgcgtt actgcctgt gggcacaagt gaacgtggat gaagtgggt gtagggccct 300
ggcaggttg gatacaaggt tacaagacag gttaaagag accaatagaa actgggcatg 360
tggagacaga gaagacttt gggttciga taggcactga ctctctgc ctattgctt 420
atttccac ccttaggtg ctgtgtct accctggac ccagaggtt ttgagctt 480
ttgggactt gtcacactt gatgctta tggcaacc taaagtgaag gctcatgaca 540
agaagtgt cgtgctt agtaggc ttgctcact ggacacct ggaacacct aaggacact 600
ttgccact gatgagct cactgaca agctgcagt gcatctgag aactcagg 660
tgaactat gtagctga gttttctt cccctctt ctatgta agtcatg 720
atggaagg gataagtaac aggtacagt ttgaatgg aacagacga atgattgat 780
cagtgtgaa gctcaggat cgtttagt tctttatt gctgtcata acaattgtt 840
tctttgtt aattcgtt tctttttt tctctcgg caattttac tattatct 900
aatgcttaa cattgtgat acaaaagaa aatctctg agatcatia agtaactaa 960
aaaaaacct tacacagct gcctagaca ttactattg gaatatagt gtgcttatt 1020
gcatactat aatcctca cttaattt aattgata taatcatat 1080
acatactat gggttaagt gtaagttt aatagtga cacataga ccaatcagg 1140
gtaatttg altgtaatt ttaaaaatg cttctctt ttaatact ttttgta 1200
tcttattct aatcttcc ctatctct tcttcagg caataatgat acaatgatac 1260

atgccctcttt gcaccattct aaagaataac agtgataatt tctgggttaa ggcaatagca	1320
atatctctgc atataaatat ttctgcatat aaattgtaac tgaigtaaga ggtttcatat	1380
tgctaatagc agctacaatc cagctacat tctgcttita tttatgggtt gggataaggc	1440
tggattattc tgagtcgaag ctaggccctt ttgctaatca tgttcatacc tcttatcttc	1500
ctcccacagc tccctgggcaa cgtgctggtc tgtgtgctgg cccatcactt tggcaaagaa	1560
ttcacccac cagtcgagc tgcctatcag aaagtgggtg ctggtgtggtc taatgcctg	1620
gccacaagt atcactaage tctcttctt gctgtccaat ttctattaaa ggttccttg	1680
ttccctaagt ccaactacta aactggggga tattatgaag ggcttgagc atctgg	1736

<210> 20

<211> 626

<212> RNA

<213> Homo sapiens

<400> 20

acauuugcuu cugacacaac uguguucacu agcaaccuca aacagacacc auggugcauc	60
ugacuccuga ggagaagucu gccguuacug ccugugggg caaggugaac guggaugaag	120
uuggugguga ggcccugggc aggcugcugg ugguuaccc uuggaccag agguucuuug	180
aguccuuugg ggaucugucc acuccugaug cuguuauagg caaccuaag gugaaggcuc	240
auggcaagaa agugcucggu gccuuuagug auggccuggc ucaccuggac aaccucaagg	300
gcaccuuugc cacacugagu gagcugcacu gugacaagcu gcacugggau ccugagaacu	360
ucaggcuccu gggcaacgug cuggucugug ugcuggccca ucacuuugc aaagaauuca	420
ccccaccagu gcaggcugcc uaucagaaag ugguggcugg uguggcuaau gcccugggcc	480

acaagauca cuaagcucgc uuucugcug uccaauuuc uuuuaaggu ccuuuguucc 540

cuaaguccaa cuacuaaacu gggggauuu augaagggcc uugagcauc ggauucugcc 600

uaauaaaaaa cauuuuuuuu cauugc 626

<210> 21

<211> 20

<212> DNA

<213> artificial sequence

<220>

<223> primer

<400> 21

actcctaagc cagtgccaga 20

<210> 22

<211> 20

<212> DNA

<213> artificial sequence

<220>

<223> primer

<220>

<221> modified_base

<222> (1).. (1)

<223> Cy5 is labeled

<400> 22

cactcagtgt ggcaaagggt 20

<210> 23
 <211> 24
 <212> DNA
 <213> artificial sequence

<220>
 <223> primer

<400> 23
 gtatcatgcc tctttgcacc attc

24

<210> 24
 <211> 22
 <212> DNA
 <213> artificial sequence

<220>
 <223> primer

<220>
 <221> modified_base
 <222> (1).. (1)
 <223> Cy5 is labeled

<400> 24
 cagatgctca aggcccttca ta

22

<210> 25
 <211> 19
 <212> DNA
 <213> artificial sequence

<220>
 <223> probe

<400> 25

gagccacacc ctagggttg

19

<210> 26

<211> 19

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 26

gagccacaca ctagggttg

19

<210> 27

<211> 19

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 27

gggctgggca taaaagtca

19

<210> 28

<211> 19

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 28

gggctgggcg taaaagtca

19

<210> 29
<211> 19
<212> DNA
<213> artificial sequence

<220>
<223> probe

<400> 29
ggctgggcat aaaagtcag

19

<210> 30
<211> 19
<212> DNA
<213> artificial sequence

<220>
<223> probe

<400> 30
ggctgggcac aaaagtcag

19

<210> 31
<211> 19
<212> DNA
<213> artificial sequence

<220>
<223> probe

<400> 31
ctgggcataa aagtcaggg

19

<210> 32
<211> 19
<212> DNA
<213> artificial sequence

<220>
<223> probe

<400> 32
ctgggcatag aagtcaggg

19

<210> 33
<211> 19
<212> DNA
<213> artificial sequence

<220>
<223> probe

<400> 33
cagacaccat ggtgcatct

19

<210> 34
<211> 19
<212> DNA
<213> artificial sequence

<220>
<223> probe

<400> 34
cagacaccag ggtgcatct

19

<210> 35
<211> 19

<212> DNA
<213> artificial sequence

<220>
<223> probe

<400> 35
acaccatggt gcatctgac

19

<210> 36
<211> 19
<212> DNA
<213> artificial sequence

<220>
<223> probe

<400> 36
acaccatggc gcatctgac

19

<210> 37
<211> 19
<212> DNA
<213> artificial sequence

<220>
<223> probe

<400> 37
ctgactcctg aggagaagt

19

<210> 38
<211> 19
<212> DNA
<213> artificial sequence

<220>

<223> probe

<400> 38

ctgactccta aggagaagt

19

<210> 39

<211> 19

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 39

ggagaagtct gccgttact

19

<210> 40

<211> 18

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 40

ggagaaggtc tgccgta

18

<210> 41

<211> 19

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 41

cgttactgcc ctgtggggc

19

<210> 42

<211> 17

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 42

gttactgccc tgggggc

17

<210> 43

<211> 19

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 43

gcaaggtgaa cgtggatga

19

<210> 44

<211> 19

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 44

gcaaggtgag cgtggatga

19

<210> 45

<211> 17

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 45

aagttaggtg tgaggcc

17

<210> 46

<211> 17

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 46

aagttaggtg taaggcc

17

<210> 47

<211> 19

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 47

cctgggcagg ttggtatca

19

<210> 48
<211> 19
<212> DNA
<213> artificial sequence

<220>
<223> probe

<400> 48
cctgggcagt ttggtatca

19

<210> 49
<211> 19
<212> DNA
<213> artificial sequence

<220>
<223> probe

<400> 49
ggcaggttgg tatcaaggt

19

<210> 50
<211> 19
<212> DNA
<213> artificial sequence

<220>
<223> probe

<400> 50
ggcaggttgc tatcaaggt

19

<210> 51
<211> 19
<212> DNA
<213> artificial sequence

<220>
<223> probe

<400> 51
ggtaggtctac ccttggacc

19

<210> 52
<211> 19
<212> DNA
<213> artificial sequence

<220>
<223> probe

<400> 52
ggtaggtctaa ccttggacc

19

<210> 53
<211> 19
<212> DNA
<213> artificial sequence

<220>
<223> probe

<400> 53
ctgttatggg caaccctaa

19

<210> 54
<211> 19

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 54

ctgttatgga caaccctaa

19

<210> 55

<211> 19

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 55

cggatgccttt agtgatggc

19

<210> 56

<211> 19

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 56

cggatgccttt aagtgatgg

19

<210> 57

<211> 16

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 57

tcaagggcac ctttgc

16

<210> 58

<211> 16

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 58

tcaaggacac ctttgc

16

<210> 59

<211> 24

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 59

ctgggttaag gcaatagcaa tate

24

<210> 60

<211> 24

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 60

ctgggttaag gtaatagcaa tate

24

<210> 61

<211> 19

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 61

aattcacccc accagtga

19

<210> 62

<211> 19

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 62

aagaattcag tgcaggctg

19

<210> 63

<211> 17

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 63

gtggctggtg tggctaa

17

<210> 64

<211> 17

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 64

gtggctgatg tggctaa

17

<210> 65

<211> 19

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 65

caagtatcac taagctcg

19

<210> 66

<211> 19

<212> DNA

<213> artificial sequence

<220>

<223> probe

<400> 66

aagtatcaca ctaagctcg

19