

ISALFSQL  
SEQUENCE LISTING

<110> OXFORD BIODYNAMICS LIMITED

<120> CHROMOSOME DETECTION

<130> P103646W001

<140> PCT/GB2017/051273

<141> 2017-05-08

<150> GB 16 08000.4

<151> 2016-05-06

<160> 119

<170> PatentIn version 3.5

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<221> misc\_feature

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<210> 44  
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ISALFSQL

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agcctctctt ctttctcctg gtgtcatgca ttccagcgaa gagaaagtac acagctccac 660
tacttggaac cagtgttgta cccagcacag tttttgttac ctgagttccc tgaaaaccag 720
caccttacc tgtaactggg gcagtctgtg tcctcagtgt gctttgatga cttgcacttt 780

```

## ISALFSQL

|                                                                   |     |
|-------------------------------------------------------------------|-----|
| aaacaagggc aagtcaacat                                             | 800 |
| <210> 71                                                          |     |
| <211> 23                                                          |     |
| <212> DNA                                                         |     |
| <213> Homo sapiens;                                               |     |
| <400> 71                                                          |     |
| aggaattcaa gactcgaact aaa                                         | 23  |
| <210> 72                                                          |     |
| <211> 20                                                          |     |
| <212> DNA                                                         |     |
| <213> Homo sapiens;                                               |     |
| <400> 72                                                          |     |
| ttgagtcctg gctctactac                                             | 20  |
| <210> 73                                                          |     |
| <211> 22                                                          |     |
| <212> DNA                                                         |     |
| <213> Homo sapiens;                                               |     |
| <400> 73                                                          |     |
| gaacaaagga ccaagtatag ct                                          | 22  |
| <210> 74                                                          |     |
| <211> 22                                                          |     |
| <212> DNA                                                         |     |
| <213> Homo sapiens;                                               |     |
| <400> 74                                                          |     |
| agctatactt ggtcctttgt tc                                          | 22  |
| <210> 75                                                          |     |
| <211> 800                                                         |     |
| <212> DNA                                                         |     |
| <213> Homo sapiens;                                               |     |
| <400> 75                                                          |     |
| taaagaagtt tcacattcat atgccaactc agattgatgg gcagcaactg gataatccgc | 60  |
| tgtgcagaaa gttaaataca ggttctgtgc aaagaagtgt ctagattcat agtgccagac | 120 |
| atctgccctg ggccacatgc ttaccgtccc atggatggat ggaacttgga atcagaagac | 180 |
| ccaagtttga gtcctggctc tactactttt gtgatttttg tcatttaacc tctttgagcc | 240 |
| ttcttatggc atagtagtta taatcaagat aatataagtg aatgtgcttt gtaaaccatg | 300 |
| aagtgttggt cacacagatg atagctactg tcttatatct gtcaaacctc agctgaggac | 360 |
| caggttgaca ggatggagga agaggaggaa ttcaagactc gaactaaaca aaaaggagat | 420 |
| gatcctgggt gggcttgact taatcaagtg aaagccttaa aagcaagagt ctctgctag  | 480 |
| tctaggaaaa gcaaacagcc ctgctatgaa tggcctatag aaaggggcag cctctaggag | 540 |
| catgggcctc agtcatatgc ccacgaggaa ctgaatattg ccagcaacca tgtgagcatg | 600 |
| gaagaggact ctaagcctct gatgagacca cagccctggc caatgctttg attgtggctc | 660 |

## ISALFSQL

tgtgaggcct tgaacaaagg accaagtata gctatgccag gacttctgaa ccacgggaat 720  
 ggtgagataa taaatgtttg gtgttttaag ccactaagtt tgtgttaatt ttttatgccg 780  
 caatagaaag cgaatactac 800

<210> 76  
 <211> 800  
 <212> DNA  
 <213> Homo sapiens;

<400> 76  
 aggtaagtta aagaccaaga actggcattg gtcttagtat catgggaccc ttttgagtag 60  
 tttcagtggg gtggtggagg gtgaaagtga aagcttaatt ggagtgggtt caagaatgca 120  
 ggaataggag gagagaaatt ggagatagca atatagaaat ctcttaaaga gttcgctgta 180  
 aagtccagga gagaggggtg aagataagtg aagtgattgt tggacgaaga tgtgggggtg 240  
 agagttgttt ttttcccatc ccaagatggg agacctatct gtatgctgat ggaatgagta 300  
 gcatgaaact taggagagag ggaaaaaatt gaatcagaag agagggaaca gattgcctga 360  
 ataatgacct ggaggaggcc agagaaaaga gaatgtgatc gatgacctta atgtcagtgt 420  
 cactgactct gacaaggagg aaaggacagc gatgagccag gctgacccc gccaccccat 480  
 tcccatagcc ccactttctt ctctcttctt gttcagaaat gtttcacttt gcctcatcta 540  
 gcccctttgg ccagtaggtc acatctggga gcttctgggg gtgccacatg tctgcctcaa 600  
 tctgggctgt ttcctccctt ccaagatatt tctgtgtctc tgggctgggc gccaggactc 660  
 ctgggtttcc ctgcctgtgg tgcagggtc ccctgcaggg ctccagagag tcgcttagct 720  
 ggtttccttc ctctttgtg gggagggcct tcccctaggg ctgggaggtg tcaggaatcc 780  
 caggtgggac aggggtgggg 800

<210> 77  
 <211> 800  
 <212> DNA  
 <213> Homo sapiens;

<400> 77  
 ttcaattgct atataaaaa tgtaaagtct gtttactgcc ttaaaccctt tggtgtatct 60  
 ttatataaag taacaccctt aattctaact tggccaacag gtaggatggt attattatta 120  
 tcttcattgt acagataagg aaactgaggc tcagattgac tagatcaaac aggagttttc 180  
 tggaaaacct aggacacaag cctaaatctt tgaactcaaa tactgctcta cactgaatta 240  
 cagttatata ctgatttctg ttgtaaattc ttagagaaga cagacataga aattagtaac 300  
 ttgagtcagt agcggctttg ttcaaacaca ggcacatgca tttttatgg tatatgttta 360  
 tatctgtgta atactcatca taaatgtcag atttataatc gagatcacag tgagctgaga 420  
 ttgcaccact gcactccagc ctgggcagcg gagtgagacc ttttctcaa aaaaaaaaaa 480  
 aaaaaaggca aaaaattaaa ttattagtat ggtaaagttt cgtttggact taatatgaaa 540  
 ctcatctcta gaaatgatga tcatttgcac agggcttaac ttcctttgct aagaaaatag 600

ISALFSQL

|                                                                    |     |
|--------------------------------------------------------------------|-----|
| agtagtatac taggagactt ccagagctgc atagagcttc aggggtcatct accaagacag | 660 |
| acaatttggtt gtcatcatca gtgttaaact ctaaattatt aagtgttat gtgccagata  | 720 |
| ctgaagtta tatacacttt ctctaacttt taataattct agaaaggat gtgtttgatc    | 780 |
| cattttcaag ataagaaaac                                              | 800 |

<210> 78  
 <211> 800  
 <212> DNA  
 <213> Homo sapiens;

|                                                                               |     |
|-------------------------------------------------------------------------------|-----|
| <400> 78<br>atgaggtttt tttccagcct tcctaagggc ctcaaagtca tatccagcag acttgcaggg | 60  |
| ttctcaggtg aaagcaaatt ggagaaattt ttaaaatgta attttggttt ttactccaac             | 120 |
| tactttcaac atggatttgt aaaagactgc taggatcatt aaaatcagca ttgaagctat             | 180 |
| gttgagcaag atggatagct gcactagaaa agctgtaaca agagtcattg tgaatgaaag             | 240 |
| gaaaattttg ctctagattt gttggtagcc aaggcacaaa aattggaagc ataatgagtt             | 300 |
| acagactcat gtctgataat atgaaagaac actaatttaa agaaaaaatc ttttctgtct             | 360 |
| gaaattttat aatttagagg aactctatat aaacaacatc gaaactttgc ttcatgcaca             | 420 |
| aaatttaaaa tattacataa aattaccttc aggctttgtg tataagatat atataaaaca             | 480 |
| taaataaatt ttgtgtttac acttgggttc catcctgaat atatctcatg atgtttatgc             | 540 |
| aaatattcca aaatctgaaa aaatctgaaa ttcaaaacac ttccgggtccc aagcattttg            | 600 |
| aataagggat actcaaccta tagctgcatt aattgaatta agacaaccac ataatctacc             | 660 |
| tgtaattttt ctctggagcc ttttcttctg agccctccac gctcttctaa ttgatactgc             | 720 |
| ttgctctact aagcctgttg aattactgta gtcctgggac ttctctttgc tcccctttcc             | 780 |
| tggcttctat atctccctct                                                         | 800 |

<210> 79  
 <211> 264  
 <212> DNA  
 <213> Homo sapiens;

|                                                                               |     |
|-------------------------------------------------------------------------------|-----|
| <400> 79<br>ggggagtgga tgggataagg tggaatgttg ggtgaactaa aaggccttta aggccctctt | 60  |
| gaaatccagc atcgaagagg gaaactgcat cacagttgat ggaagtctgt tggcctctta             | 120 |
| acaaagctaa tgcttgccct tctggcttag cttacataag aaccacaagg aatctttggt             | 180 |
| gaattgtttc tttcagatca tcgggacaac tctccttttg atggacctgg aggaaatctt             | 240 |
| gctcatgctt ttcaaccagg ccca                                                    | 264 |

<210> 80  
 <211> 22  
 <212> DNA  
 <213> Homo sapiens;

|                                      |    |
|--------------------------------------|----|
| <400> 80<br>ggggagtgga tgggataagg tg | 22 |
|--------------------------------------|----|

# ISALFSQL

```

<210> 81
<211> 20
<212> DNA
<213> Homo sapiens;

<400> 81
tgggcctggt tgaaaagcat 20

<210> 82
<211> 29
<212> DNA
<213> Homo sapiens;

<400> 82
atccagcatc gaagaggga actgcatca 29

<210> 83
<211> 60
<212> DNA
<213> Homo sapiens;

<400> 83
ttggaggga aagtaattac gttcaacttc gactgtattc tacaaagtgc tgggattaca 60

<210> 84
<211> 60
<212> DNA
<213> Homo sapiens;

<400> 84
ggaggaggcc agagaaaaga gaatgtgac gatttctaaa atactgtgtg tgtgtatgta 60

<210> 85
<211> 60
<212> DNA
<213> Homo sapiens;

<400> 85
ggatggagga agaggaggaa ttcaagactc gaactaaaca aaaaggagat gatcctgggt 60

<210> 86
<211> 60
<212> DNA
<213> Homo sapiens;

<400> 86
aggatctcat gatgctttga atactttctc gataccttat tataaaatca gctttgtgtt 60

<210> 87
<211> 60
<212> DNA
<213> Homo sapiens;

<400> 87
agctcaaatt cttttactaa ttgttacatc gaaagttcaa aattaaattt taaacgtttt 60

<210> 88
<211> 60
<212> DNA

```

## ISALFSQL

<213> Homo sapiens;  
 <400> 88  
 aatttagagg aactctatat aaacaacatc gaaactttgc ttcatgcaca aaatttataaa 60  
  
 <210> 89  
 <211> 60  
 <212> DNA  
 <213> Homo sapiens;  
 <400> 89  
 cagaaatgca cgcacaggca caacagcatc gaaaccgggtt ctttgagggc tcagtttttg 60  
  
 <210> 90  
 <211> 60  
 <212> DNA  
 <213> Homo sapiens;  
 <400> 90  
 cctacatata catggaatat tcctggtatc gaaatatttt aggtaatcat tatttgctta 60  
  
 <210> 91  
 <211> 22  
 <212> DNA  
 <213> Homo sapiens;  
 <400> 91  
 tccagagggtt atggaatttg ag 22  
  
 <210> 92  
 <211> 19  
 <212> DNA  
 <213> Homo sapiens;  
 <400> 92  
 aagaaacaga ctgggcttg 19  
  
 <210> 93  
 <211> 21  
 <212> DNA  
 <213> Homo sapiens;  
 <400> 93  
 gcatgaaact taggagagag g 21  
  
 <210> 94  
 <211> 20  
 <212> DNA  
 <213> Homo sapiens;  
 <400> 94  
 ttgccaccat gtgactatac 20  
  
 <210> 95  
 <211> 22  
 <212> DNA  
 <213> Homo sapiens;  
 <400> 95  
 gtgctttgta aaccatgaag tg 22

# ISALFSQL

|                             |    |
|-----------------------------|----|
| <210> 96                    |    |
| <211> 19                    |    |
| <212> DNA                   |    |
| <213> Homo sapiens;         |    |
| <400> 96                    |    |
| tcgtgggcat atgactgag        | 19 |
|                             |    |
| <210> 97                    |    |
| <211> 20                    |    |
| <212> DNA                   |    |
| <213> Homo sapiens;         |    |
| <400> 97                    |    |
| accctccttc actcacatag       | 20 |
|                             |    |
| <210> 98                    |    |
| <211> 23                    |    |
| <212> DNA                   |    |
| <213> Homo sapiens;         |    |
| <400> 98                    |    |
| gcacctaatac tacctaacaac cac | 23 |
|                             |    |
| <210> 99                    |    |
| <211> 19                    |    |
| <212> DNA                   |    |
| <213> Homo sapiens;         |    |
| <400> 99                    |    |
| ggcattgctt tgccttatc        | 19 |
|                             |    |
| <210> 100                   |    |
| <211> 20                    |    |
| <212> DNA                   |    |
| <213> Homo sapiens;         |    |
| <400> 100                   |    |
| caacttcctt ggggtgtagag      | 20 |
|                             |    |
| <210> 101                   |    |
| <211> 20                    |    |
| <212> DNA                   |    |
| <213> Homo sapiens;         |    |
| <400> 101                   |    |
| tggtgagcaa gatggatagc       | 20 |
|                             |    |
| <210> 102                   |    |
| <211> 21                    |    |
| <212> DNA                   |    |
| <213> Homo sapiens;         |    |
| <400> 102                   |    |
| atattcagga tggaaccaca g     | 21 |
|                             |    |
| <210> 103                   |    |
| <211> 22                    |    |
| <212> DNA                   |    |
| <213> Homo sapiens;         |    |

# ISALFSQL

|                                                                                |    |
|--------------------------------------------------------------------------------|----|
| <400> 103<br>ggagtgtaca tcgttggtaa tg                                          | 22 |
| <210> 104<br><211> 22<br><212> DNA<br><213> Homo sapiens;                      |    |
| <400> 104<br>gcaaataaag actgctgggt tc                                          | 22 |
| <210> 105<br><211> 22<br><212> DNA<br><213> Homo sapiens;                      |    |
| <400> 105<br>aggacccatc acctacatat ac                                          | 22 |
| <210> 106<br><211> 20<br><212> DNA<br><213> Homo sapiens;                      |    |
| <400> 106<br>agccaagttt atgccaagag                                             | 20 |
| <210> 107<br><211> 60<br><212> DNA<br><213> Homo sapiens;                      |    |
| <400> 107<br>ttggagggaa aagtaattac gttcaacttc gactgtattc tacaaagtgc tgggattaca | 60 |
| <210> 108<br><211> 60<br><212> DNA<br><213> Homo sapiens;                      |    |
| <400> 108<br>ggaggaggcc agagaaaaga gaatgtgac gatttctaaa atactgtgtg tgtgtatgta  | 60 |
| <210> 109<br><211> 60<br><212> DNA<br><213> Homo sapiens;                      |    |
| <400> 109<br>ggaggaggcc agagaaaaga gaatgtgac gatgacctta atgtcagtgt cactgactct  | 60 |
| <210> 110<br><211> 60<br><212> DNA<br><213> Homo sapiens;                      |    |
| <400> 110<br>ggaggaggcc agagaaaaga gaatgtgac gatgacctta atgtcagtgt cactgactct  | 60 |

# ISALFSQL

```

<210> 111
<211> 60
<212> DNA
<213> Homo sapiens;

<400> 111
ccaaagacag ccaaggaaaa actaaagatc gaaagttttt attacttcca aattagtaaa 60

<210> 112
<211> 60
<212> DNA
<213> Homo sapiens;

<400> 112
aggatctcat gatgctttga atactttctc gataccttat tataaaatca gctttgtgtt 60

<210> 113
<211> 60
<212> DNA
<213> Homo sapiens;

<400> 113
cataattttt tttttagtgg tattcacctc gactagattt taatttttaa tttttattta 60

<210> 114
<211> 60
<212> DNA
<213> Homo sapiens;

<400> 114
cctacatata catggaatat tcctggtatc gaaatatttt aggtaatcat tatttgtcta 60

<210> 115
<211> 60
<212> DNA
<213> Homo sapiens;

<400> 115
atttctttct tcttccatt ttctaaaatc gatttttaaa ttaaaggtag aagttaaggc 60

<210> 116
<211> 60
<212> DNA
<213> Homo sapiens;

<400> 116
atactcatca taaatgtcag atttataatc gagatcacag tgagctgaga ttgcaccact 60

<210> 117
<211> 60
<212> DNA
<213> Homo sapiens;

<400> 117
agctcaaatt cttttactaa ttgttacatc gaaagttcaa aattaaattt taaacgtttt 60

<210> 118
<211> 60
<212> DNA
<213> Homo sapiens;

```

ISALFSQL

<400> 118  
ggatggagga agaggaggaa ttcaagactc gaactaaaca aaaaggagat gatcctgggt 60

<210> 119  
<211> 60  
<212> DNA  
<213> Homo sapiens;

<400> 119  
aatttagagg aactctatat aaacaacatc gaaactttgc ttcatgcaca aaatttaaaa 60