

SEQUENCE LISTING

<110> Encodia, Inc.

<120> MACROMOLECULE ANALYSIS EMPLOYING NUCLEIC
ACID ENCODING

<130> SP100242SGM

<140> PCT

<141> 2017-05-02

<150> US 62/330,841

<151> 2016-05-02

<150> US 62/339,071

<151> 2016-05-19

<150> US 62/376,886

<151> 2016-08-18

<160> 180

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_1

<400> 1

atgtctagca tgccg

15

<210> 2

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_2

<400> 2

ccgtgtcatg tggaa

15

<210> 3

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_3

<400> 3

taagccggta tatca

15

<210> 4

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_4

<400> 4

ttcgatatga cggaa

15

<210> 5

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_5

<400> 5

cgtatacgcg ttagg

15

<210> 6

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_6

<400> 6

aactgccgag attcc

15

<210> 7

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_7

<400> 7

tgatcttagc tgtgc

15

<210> 8

<211> 15

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> oligonucleotide barcode BC_8

 <400> 8
 gagtcggtac cttga 15

 <210> 9
 <211> 15
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> oligonucleotide barcode BC_9

 <400> 9
 ccgcttgtga tctgg 15

 <210> 10
 <211> 15
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> oligonucleotide barcode BC_10

 <400> 10
 agatagcgta ccgga 15

 <210> 11
 <211> 15
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> oligonucleotide barcode BC_11

 <400> 11
 tccaggctca tcatc 15

 <210> 12
 <211> 15
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> oligonucleotide barcode BC_12

 <400> 12

gagtactaga gccaa 15

<210> 13

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_13

<400> 13

gagcgtcaat aacgg

15

<210> 14

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_14

<400> 14

gcggtatcta cactg

15

<210> 15

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_15

<400> 15

cttctccgaa gagaa

15

<210> 16

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_16

<400> 16

tgaagcctgt gttaa

15

<210> 17

<211> 15

<212> DNA

<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_17

<400> 17
ctggatgggt gtcga 15

<210> 18
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_18

<400> 18
actgcacggt tccaa 15

<210> 19
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_19

<400> 19
cgagagatgg tcctt 15

<210> 20
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_20

<400> 20
tcttgagaga caaga 15

<210> 21
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_21

<400> 21

aattcgcaact gtggtt 15

<210> 22

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_22

<400> 22

gtagtgccgc taaga

15

<210> 23

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_23

<400> 23

cctatagcac aatcc

15

<210> 24

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_24

<400> 24

atcaccgagg ttgga

15

<210> 25

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_25

<400> 25

gattcaacgg agaag

15

<210> 26

<211> 15

<212> DNA

<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_26

<400> 26
acgaacctcg cacca 15

<210> 27
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_27

<400> 27
aggacttcaa gaaga 15

<210> 28
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_28

<400> 28
ggttgaatcc tcgca 15

<210> 29
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_29

<400> 29
aaccaacctc tagcg 15

<210> 30
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_30

<400> 30

acgcgaatat ctaac 15

<210> 31

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_31

<400> 31

gttgagaatt acacc

15

<210> 32

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_32

<400> 32

ctctctctgt gaacc

15

<210> 33

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_33

<400> 33

gccatcagta agaga

15

<210> 34

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_34

<400> 34

gcaacgtgaa ttgag

15

<210> 35

<211> 15

<212> DNA

<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_35

<400> 35
ctaagtagag ccaca 15

<210> 36
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_36

<400> 36
tgtctgttgg aagcg 15

<210> 37
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_37

<400> 37
ttaatagaca gcgcg 15

<210> 38
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_38

<400> 38
cgacgtcta acaag 15

<210> 39
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_39

<400> 39

catggcttat tgaga 15

<210> 40

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_40

<400> 40

actaggtatg gccgg

15

<210> 41

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_41

<400> 41

gtcctcgtct atcct

15

<210> 42

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_42

<400> 42

taggattccg ttacc

15

<210> 43

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_43

<400> 43

tctgaccacc ggaag

15

<210> 44

<211> 15

<212> DNA

<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_44

<400> 44
agagtcacct cgtgg 15

<210> 45
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_45

<400> 45
ctgatgtagt cgaag 15

<210> 46
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_46

<400> 46
gtcggttgcg gatag 15

<210> 47
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_47

<400> 47
tcctcctcct aagaa 15

<210> 48
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_48

<400> 48

attcgggtcca cttca 15

<210> 49

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_49

<400> 49

ccttacaggt ctgcg

15

<210> 50

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_50

<400> 50

gatcattggc caatt

15

<210> 51

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_51

<400> 51

ttcaaggctg agttg

15

<210> 52

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_52

<400> 52

tggctcgatt gaatc

15

<210> 53

<211> 15

<212> DNA

<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_53

<400> 53
gtaagccatc cgctc 15

<210> 54
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_54

<400> 54
acacatgcgt agaca 15

<210> 55
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_55

<400> 55
tgctatggat tcaag 15

<210> 56
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_56

<400> 56
ccacgaggct tagtt 15

<210> 57
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_57

<400> 57

ggccaactaa ggtgc 15

<210> 58

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_58

<400> 58

gcacctattc gacaa

15

<210> 59

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_59

<400> 59

tggacacgat cggct

15

<210> 60

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_60

<400> 60

ctataattcc aacgg

15

<210> 61

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_61

<400> 61

aacgtggtta gtaag

15

<210> 62

<211> 15

<212> DNA

<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_62

<400> 62
caaggaacga gtggc 15

<210> 63
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_63

<400> 63
caccagaacg gaaga 15

<210> 64
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_64

<400> 64
cgtacggtca agcaa 15

<210> 65
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_65

<400> 65
tcggtgacag gctaa 15

<210> 66
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_1 REV

<400> 66

cggcatgcta gacat 15

<210> 67

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_2 REV

<400> 67

ttccacatga cacgg 15

<210> 68

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_3 REV

<400> 68

tgatataccg gctta 15

<210> 69

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_4 REV

<400> 69

ttccgtcata tcgaa 15

<210> 70

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_5 REV

<400> 70

cctaacgcgt atacg 15

<210> 71

<211> 15

<212> DNA

<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_6 REV

<400> 71
ggaatctcgg cagtt 15

<210> 72
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_7 REV

<400> 72
gcacagctaa gatca 15

<210> 73
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_8 REV

<400> 73
tcaaggtacc gactc 15

<210> 74
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_9 REV

<400> 74
ccagatcaca agcgg 15

<210> 75
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_10 REV

<400> 75

tccggtacgc tatct 15

<210> 76
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_11 REV

<400> 76
gatgatgagc ctgga 15

<210> 77
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_12 REV

<400> 77
ttggctctag tactc 15

<210> 78
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_13 REV

<400> 78
ccgttattga cgctc 15

<210> 79
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_14 REV

<400> 79
cagtgtagat accgc 15

<210> 80
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_15 REV

<400> 80
ttctcttcgg agaag 15

<210> 81
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_16 REV

<400> 81
ttaacacagg cttca 15

<210> 82
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_17 REV

<400> 82
tcgacaacca tccag 15

<210> 83
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_18 REV

<400> 83
ttggaaccgt gcagt 15

<210> 84
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_19 REV

<400> 84

aaggaccatc tctcg 15

<210> 85

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_20 REV

<400> 85

tcttgtctct caaga

15

<210> 86

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_21 REV

<400> 86

aacacagtgc gaatt

15

<210> 87

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_22 REV

<400> 87

tcttagcggc actac

15

<210> 88

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_23 REV

<400> 88

ggattgtgct atagg

15

<210> 89

<211> 15

<212> DNA

<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_24 REV

<400> 89
tccaacctcg gtgat 15

<210> 90
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_25 REV

<400> 90
cttctccggt gaatc 15

<210> 91
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_26 REV

<400> 91
tggtgcgagg ttcgt 15

<210> 92
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_27 REV

<400> 92
tcttcttgaa gtcct 15

<210> 93
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_28 REV

<400> 93

tgcgaggatt caacc 15

<210> 94

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_29 REV

<400> 94

cgctagaggt tggtt

15

<210> 95

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_30 REV

<400> 95

gtagatatt cgcgt

15

<210> 96

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_31 REV

<400> 96

ggtgtaattc tcaac

15

<210> 97

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_32 REV

<400> 97

ggttcacaga gagag

15

<210> 98

<211> 15

<212> DNA

<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_33 REV

<400> 98
tctcttactg atggc 15

<210> 99
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_34 REV

<400> 99
ctcaattcac gttgc 15

<210> 100
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_35 REV

<400> 100
tgtggctcta cttag 15

<210> 101
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_36 REV

<400> 101
cgcttccaac agaca 15

<210> 102
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_37 REV

<400> 102

cgcgctgtct attaa 15

<210> 103

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_38 REV

<400> 103

cttgtagag cgtcg

15

<210> 104

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_39 REV

<400> 104

tctcaataag ccatg

15

<210> 105

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_40 REV

<400> 105

ccggccatac ctagt

15

<210> 106

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_41 REV

<400> 106

aggatagacg aggac

15

<210> 107

<211> 15

<212> DNA

<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_42 REV

<400> 107
ggtaacggaa tccta 15

<210> 108
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_43 REV

<400> 108
cttccggtgg tcaga 15

<210> 109
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_44 REV

<400> 109
ccacgaggtg actct 15

<210> 110
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_45 REV

<400> 110
cttcgactac atcag 15

<210> 111
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_46 REV

<400> 111

ctatccgcaa ccgac 15

<210> 112

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_47 REV

<400> 112

ttcttaggag gagga

15

<210> 113

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_48 REV

<400> 113

tgaagtggac cgaat

15

<210> 114

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_49 REV

<400> 114

cgcagacctg taagg

15

<210> 115

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide barcode BC_50 REV

<400> 115

aattggccaa tgatc

15

<210> 116

<211> 15

<212> DNA

<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_51 REV

<400> 116
caactcagcc ttgaa 15

<210> 117
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_52 REV

<400> 117
gattcaatcg agcca 15

<210> 118
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_53 REV

<400> 118
gagcggatgg cttac 15

<210> 119
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_54 REV

<400> 119
tgtctacgca tgtgt 15

<210> 120
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_55 REV

<400> 120

cttgaatcca tagca	15
<210> 121	
<211> 15	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> oligonucleotide barcode BC_56 REV	
<400> 121	15
aactaagcct cgtgg	
<210> 122	
<211> 15	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> oligonucleotide barcode BC_57 REV	
<400> 122	15
gcaccttagt tggcc	
<210> 123	
<211> 15	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> oligonucleotide barcode BC_58 REV	
<400> 123	15
ttgtcgaata ggtgc	
<210> 124	
<211> 15	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> oligonucleotide barcode BC_59 REV	
<400> 124	15
agccgatcgt gtcca	
<210> 125	
<211> 15	
<212> DNA	
<213> Artificial Sequence	

<220>
<223> oligonucleotide barcode BC_60 REV

<400> 125
ccgttggaat tatag 15

<210> 126
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_61 REV

<400> 126
cttactaacc acgtt 15

<210> 127
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_62 REV

<400> 127
gccactcgtt ccttg 15

<210> 128
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_63 REV

<400> 128
tcttccggtc tggtg 15

<210> 129
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_64 REV

<400> 129

ttgcttgacc gtacg 15

<210> 130
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide barcode BC_65 REV

<400> 130
ttagcctgtc accga 15

<210> 131
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide

<220>
<221> MOD_RES
<222> 1
<223> formyl-Methionine

<400> 131
Met Asp Val Glu Ala Trp Leu Gly Ala Arg Val Pro Leu Val Glu Thr
1 5 10 15

<210> 132
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide

<400> 132
Thr Glu Asn Leu Tyr Phe Gln Asn His Val
1 5 10

<210> 133
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide primer

<400> 133
aatgatacgg cgaccaccga 20

<210> 134
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide primer

<400> 134
caagcagaag acggcatacg agat

24

<210> 135
<211> 5
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide

<220>
<221> misc_feature
<222> (1)...(5)
<223> n = A,T,C or G

<400> 135
nnnnnn

5

<210> 136
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide

<400> 136
Asp Tyr Lys Asp Asp Asp Asp Lys
1 5

<210> 137
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide

<400> 137
Gly Lys Pro Ile Pro Asn Pro Leu Leu Gly Leu Asp Ser Thr
1 5 10

<210> 138
<211> 10
<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic peptide

<400> 138

Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu
1 5 10

<210> 139

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic peptide

<400> 139

Tyr Pro Tyr Asp Val Pro Asp Tyr Ala
1 5

<210> 140

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic peptide

<400> 140

Asn Trp Ser His Pro Gln Phe Glu Lys
1 5

<210> 141

<211> 82

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic oligonucleotide

<220>

<221> modified_base

<222> 1

<223> biotin

<400> 141

tttttgcaaa tggcattctg acatcccgta gtccgcgaca ctagatgtct agcatgccgc 60
cgtgtcatgt ggaaactgag tg 82

<210> 142

<211> 72

<212> DNA

<213> Artificial Sequence

<220>
 <223> synthetic oligonucleotide

<220>
 <221> modified_base
 <222> 1
 <223> biotin

<400> 142
 tttttttttt gactggttcc aattgacaag ccgtagtccg cgacactagt aagccggtat 60
 atcaactgag tg 72

<210> 143
 <211> 10
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> synthetic oligonucleotide

<220>
 <221> modified_base
 <222> 1
 <223> biotin

<220>
 <221> modified_base
 <222> 10
 <223> three carbon (3C) spacer

<400> 143
 tttttttttt 10

<210> 144
 <211> 62
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> synthetic oligonucleotide

<220>
 <221> modified_base
 <222> (31)...(32)
 <223> 18-atom hexa-ethyleneglycol spacer

<220>
 <221> modified_base
 <222> 62
 <223> three carbon (3C) spacer

<400> 144
 ggatgtcaga atgccatttg cttttttttt tcactcagtc ctaacgcgta tacgcactca 60

gt 62

<210> 145
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (31)...(32)
<223> 18-atom hexa-ethyleneglycol spacer

<220>
<221> modified_base
<222> 63
<223> three carbon (3C) spacer

<400> 145
ggatgtcaga atgccatttg cttttttttt tcactcagtc ctaacgcgta tacgtcactc 60
agt 63

<210> 146
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (31)...(32)
<223> five 18-atom hexa-ethyleneglycol spacers

<220>
<221> modified_base
<222> 63
<223> three carbon (3C) spacer

<400> 146
ggatgtcaga atgccatttg cttttttttt tcactcagtc ctaacgcgta tacgtcactc 60
agt 63

<210> 147
<211> 71
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic oligonucleotide

<220>
 <221> modified_base
 <222> (25)...(26)
 <223> 18-atom hexa-ethyleneglycol spacer

<220>
 <221> modified_base
 <222> 63
 <223> three carbon (3C) spacer

<400> 147
 gcttggtcaat tggaaccagt cttttcactc agtcctaacg cgtatacggg aatctcggca 60
 gttcactcag t 71

<210> 148
 <211> 44
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> synthetic oligonucleotide

<220>
 <221> modified_base
 <222> 44
 <223> three carbon (3C) spacer

<400> 148
 cgatttgcaa ggatcactcg tcactcagtc ctaacgcgta tacg 44

<210> 149
 <211> 8
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> spacer sequence

<400> 149
 actgagtg 8

<210> 150
 <211> 8
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> spacer sequence

<400> 150
 cactcagt 8

<210> 151
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide primer

<400> 151
cgtagtccgc gacactag 18

<210> 152
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide primer

<400> 152
cgatttgcaa ggatcactcg 20

<210> 153
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic oligonucleotide

<400> 153
gcaaattggca ttctgacatc c 21

<210> 154
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic oligonucleotide

<400> 154
gactggttcc aattgacaag c 21

<210> 155
<211> 23
<212> DNA
<213> Artificial Sequence

<220>

<223> synthetic oligonucleotide
 <220>
 <221> modified_base
 <222> 23
 <223> three carbon (3C) spacer
 <400> 155
 cgtatacgcg ttaggactga gtg 23
 <210> 156
 <211> 38
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> synthetic oligonucleotide
 <220>
 <221> modified_base
 <222> 38
 <223> three carbon (3C) spacer
 <400> 156
 aactgccgag attcccgtat acgcgttagg actgagtg 38
 <210> 157
 <211> 46
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> oligonucleotide primer
 <400> 157
 agtccgcgca atcagatgtc tagcatgccg gatccggatc gatctc 46
 <210> 158
 <211> 46
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> oligonucleotide primer
 <400> 158
 agtccgcgca atcagccgtg tcatgtggaa gatccggatc gatctc 46
 <210> 159
 <211> 46
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> oligonucleotide primer

<400> 159
 agtccgcgca atcagtaagc cggatatca gatccggatc gatctc 46

<210> 160
 <211> 46
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> oligonucleotide primer

<400> 160
 agtccgcgca atcagttcga tatgacggaa gatccggatc gatctc 46

<210> 161
 <211> 46
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> oligonucleotide primer

<400> 161
 tgcaaggatc actcgccaga tcacaagcgg gagatcgatc cggatc 46

<210> 162
 <211> 46
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> oligonucleotide primer

<400> 162
 tgcaaggatc actcgtccgg tacgctatct gagatcgatc cggatc 46

<210> 163
 <211> 46
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> oligonucleotide primer

<400> 163

tgcaaggatc actcggatga tgagcctgga gagatcgatc cggatc 46

<210> 164

<211> 46

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide primer

<400> 164

tgcaaggatc actcgttggc tctagtactc gagatcgatc cggatc 46

<210> 165

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide primer

<400> 165

aatcgtagtc cgcgcaatca g 21

<210> 166

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide primer

<400> 166

acgatttgca aggatcactc g 21

<210> 167

<211> 16

<212> DNA

<213> Artificial Sequence

<220>

<223> spacer sequence

<400> 167

gatccggatc gatctc 16

<210> 168

<211> 734

<212> DNA

<213> Artificial Sequence

<220>

<223> extended recording tag construct

<400> 168

aatcacggta	caagtcactc	atccgtacgc	tatctgagaa	tcgtccagat	ccggcatgct	60
agtatctggg	gcagactacg	attgttacag	atcactcaga	tgatgagcac	agaaaatcgt	120
cgaatctttc	atcaccatcg	aacagttacg	attaatgtag	tccgcacaat	cgaatgtcta	180
acatgccgaa	tcccggacgt	ctccagcttc	taaaccaaca	gtagtcgcac	aaatcattgt	240
acggtacaag	atctaacgag	agatgatcgg	atctgaccac	tttaaact	gattacgcag	300
actacgatta	cgatttaaga	atcctcgtcc	ggtacaatca	tagtccgcac	aatcaaccgt	360
gtcatgtgaa	gatcagatcg	atctcgaata	gcgtaccaga	cagtgatctt	gcaaatacgta	420
atgtgtccgc	gccaatcgat	agccatgaat	cccagtcgat	ctcccgcttg	tgatctggcg	480
atcgccttgt	accgtcgtac	gatttgagat	cacctcgta	actcaagcta	aagatcgctc	540
ggatcgcttt	ataaacatct	gattgcgcgg	tacgattatc	gtagtcgcga	catatcgaac	600
ctgttgaaga	tccggatcgt	ctctccaggc	tcatcatccg	agtgatcctt	gcaaataatc	660
atgtccgcac	catcagggtg	ctaacgcttg	ccggatccga	atcgatctct	ccaggctcat	720
catcgaagtg	atgt					734

<210> 169

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic peptide

<400> 169

Cys	Pro	Val	Gln	Leu	Trp	Val	Asp	Ser	Thr
1				5					10

<210> 170

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic peptide

<220>

<221> VARIANT

<222> (1)...(10)

<223> Xaa = Any Amino Acid

<400> 170

Cys	Pro	Xaa	Gln	Xaa	Trp	Xaa	Asp	Xaa	Thr
1				5					10

<210> 171

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> FLAG epitope peptide

<400> 171

Asp Tyr Lys Asp Asp Asp Asp Lys
1 5

<210> 172

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> V5 epitope peptide

<400> 172

Gly Lys Pro Ile Pro Asn Pro Leu Leu Gly Leu Asp Ser Thr
1 5 10

<210> 173

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> c-Myc epitope peptide

<400> 173

Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu
1 5 10

<210> 174

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> HA epitope peptide

<400> 174

Tyr Pro Tyr Asp Val Pro Asp Tyr Ala
1 5

<210> 175

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> V5 epitope peptide

<400> 175

Gly Lys Pro Ile Pro Asn Pro Leu Leu Gly Leu Asp Ser Thr
1 5 10

<210> 176
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> StrepTag II peptide

<400> 176
Asn Trp Ser His Pro Gln Phe Glu Lys
1 5

<210> 177
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic nucleotide

<220>
<221> misc_feature
<222> (11)...(22)
<223> compartment barcode n = A, C, T, or G

<220>
<221> misc_feature
<222> (23)...(27)
<223> unique molecular identifier n = A, T, C or G

<400> 177
gcgcaatcag nnnnnnnnnn nnnnnntgc aaggat 36

<210> 178
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic nucleotide

<220>
<221> misc_feature
<222> (1)...(12)
<223> Compartment barcode n = A, T, C or G

<400> 178
nnnnnnnnnn nn 12

<210> 179
<211> 5
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic nucleotide

<220>
<221> misc_feature
<222> (1)...(5)
<223> Unique molecular identifier; n = A, T, C or G

<400> 179
nnnnn

5

<210> 180
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> butelase I peptide substrate

<400> 180
Cys Gly Gly Ser Ser Gly Ser Asn His Val
1 5 10