

NGMB-139WO+SeqList_ST25+(4039777v1)
SEQUENCE LISTING

<110> NGM Biopharmaceuticals, Inc.
Lindhout, Darrin A
Haldankar, Raj
Tian, Hui

<120> COMPOSITIONS AND METHODS OF USE FOR TREATING METABOLIC DISORDERS

<130> NGMB-139WO

<150> US 62/031,063

<151> 2014-07-30

<160> 127

<170> PatentIn version 3.5

<210> 1

<211> 112

<212> PRT

<213> Homo sapiens

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Ala Arg Asn Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg
1 5 10 15

Leu His Thr Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp
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Val Leu Ser Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys
35 40 45

Pro Ser Gln Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser
50 55 60

Leu His Arg Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro
65 70 75 80

Ala Ser Tyr Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val
85 90 95

Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
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Ala Arg Asn Gly Thr His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg
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Leu His Thr Val Asn Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp
Page 1

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Val Leu Ser Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys
35 40 45

Pro Ser Gln Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser
50 55 60

Leu His Arg Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro
65 70 75 80

Ala Ser Tyr Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val
85 90 95

Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
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Ala Arg Asn Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Asn
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Leu Thr Thr Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp
20 25 30

Val Leu Ser Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys
35 40 45

Pro Ser Gln Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser
50 55 60

Leu His Arg Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro
65 70 75 80

Ala Ser Tyr Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val
85 90 95

Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
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Leu His Thr Val Arg Ala Asn Leu Thr Asp Leu Gly Trp Ala Asp Trp
20 25 30

Val Leu Ser Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys
35 40 45

Pro Ser Gln Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser
50 55 60

Leu His Arg Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro
65 70 75 80

Ala Ser Tyr Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val
85 90 95

Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
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Ala Arg Asn Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg
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Leu His Thr Val Arg Ala Ser Asn Glu Thr Leu Gly Trp Ala Asp Trp
20 25 30

Val Leu Ser Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys
35 40 45

Pro Ser Gln Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser
50 55 60

Leu His Arg Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro
65 70 75 80

Ala Ser Tyr Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val
85 90 95

Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
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Leu His Thr Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp
 20 25 30

Val Leu Ser Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys
 35 40 45

Pro Asn Gln Thr Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser
 50 55 60

Leu His Arg Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro
 65 70 75 80

Ala Ser Tyr Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val
 85 90 95

Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
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Leu His Thr Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp
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Val Leu Ser Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys
 35 40 45

Pro Ser Asn Phe Thr Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser
 50 55 60

Leu His Arg Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro
 65 70 75 80

NGMB-139WO+SeqList_ST25+(4039777v1)

Ala Ser Tyr Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val
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Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
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Ala Arg Asn Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg
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Leu His Thr Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp
20 25 30

Val Leu Ser Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys
35 40 45

Pro Ser Gln Asn Arg Thr Ala Asn Met His Ala Gln Ile Lys Thr Ser
50 55 60

Leu His Arg Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro
65 70 75 80

Ala Ser Tyr Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val
85 90 95

Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
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Ala Arg Asn Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg
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Leu His Thr Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp
20 25 30

Val Leu Ser Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys
35 40 45

NGMB-139WO+SeqList_ST25+(4039777v1)

Pro Ser Gln Phe Asn Ala Thr Asn Met His Ala Gln Ile Lys Thr Ser
50 55 60

Leu His Arg Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro
65 70 75 80

Ala Ser Tyr Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val
85 90 95

Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
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Ala Arg Asn Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg
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Leu His Thr Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp
20 25 30

Val Leu Ser Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys
35 40 45

Pro Ser Gln Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Asn
50 55 60

Leu Thr Arg Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro
65 70 75 80

Ala Ser Tyr Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val
85 90 95

Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
100 105 110

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NGMB-139WO+SeqList_ST25+(4039777v1)

Leu His Thr Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp
20 25 30

Val Leu Ser Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys
35 40 45

Pro Ser Gln Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser
50 55 60

Asn His Thr Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro
65 70 75 80

Ala Ser Tyr Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val
85 90 95

Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
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Ala Arg Asn Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg
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Leu His Thr Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp
20 25 30

Val Leu Ser Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys
35 40 45

Pro Ser Gln Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser
50 55 60

Leu His Arg Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro
65 70 75 80

Ala Asn Tyr Thr Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val
85 90 95

Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
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Ala Arg Asn Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg
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Leu His Thr Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp
20 25 30

Val Leu Ser Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys
35 40 45

Pro Ser Gln Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser
50 55 60

Leu His Arg Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro
65 70 75 80

Ala Ser Tyr Asn Pro Met Val Leu Ile Gln Asn Thr Thr Thr Gly Val
85 90 95

Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
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Ala Arg Asn Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg
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Leu His Thr Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp
20 25 30

Val Leu Ser Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys
35 40 45

Pro Ser Gln Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser
50 55 60

Leu His Arg Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro
65 70 75 80

Ala Ser Tyr Asn Pro Met Val Leu Ile Gln Lys Thr Asn Thr Thr Val
85 90 95

Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
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Leu His Thr Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp
20 25 30

Val Leu Ser Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys
35 40 45

Pro Ser Gln Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser
50 55 60

Leu His Arg Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro
65 70 75 80

Ala Ser Tyr Asn Pro Met Val Leu Ile Gln Lys Thr Asp Asn Gly Thr
85 90 95

Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
100 105 110

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Ala Arg Asn Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg
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Leu His Thr Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp
20 25 30

Val Leu Ser Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys
35 40 45

Pro Ser Gln Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser
50 55 60

Leu His Arg Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro

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Ala Ser Tyr Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Asn
85 90 95

Ser Thr Gln Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
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Ala Arg Asn Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg
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Leu His Thr Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp
20 25 30

Val Leu Ser Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys
35 40 45

Pro Ser Gln Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser
50 55 60

Leu His Arg Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro
65 70 75 80

Ala Ser Tyr Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val
85 90 95

Asn Leu Thr Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
100 105 110

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Ala Arg Asn Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg
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Leu His Thr Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp
20 25 30

Val Leu Ser Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys
Page 10

35

40

45

Pro Ser Gln Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser
50 55 60

Leu His Arg Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro
65 70 75 80

Ala Ser Tyr Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val
85 90 95

Ser Leu Gln Thr Tyr Asp Asp Leu Leu Asn Lys Thr Cys His Cys Ile
100 105 110

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Gly Thr His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg Leu His Thr
1 5 10 15

Val Asn Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp Val Leu Ser
20 25 30

Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys Pro Ser Gln
35 40 45

Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser Leu His Arg
50 55 60

Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro Ala Ser Tyr
65 70 75 80

Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val Ser Leu Gln
85 90 95

Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
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Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Asn Leu Thr Thr
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1 5 10 15
 Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp Val Leu Ser
 20 25 30
 Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys Pro Ser Gln
 35 40 45
 Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser Leu His Arg
 50 55 60
 Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro Ala Ser Tyr
 65 70 75 80
 Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val Ser Leu Gln
 85 90 95
 Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
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Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg Leu His Thr
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 Val Arg Ala Asn Leu Thr Asp Leu Gly Trp Ala Asp Trp Val Leu Ser
 20 25 30
 Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys Pro Ser Gln
 35 40 45
 Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser Leu His Arg
 50 55 60
 Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro Ala Ser Tyr
 65 70 75 80
 Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val Ser Leu Gln
 85 90 95
 Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
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Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg Leu His Thr
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Val Arg Ala Ser Asn Glu Thr Leu Gly Trp Ala Asp Trp Val Leu Ser
20 25 30

Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys Pro Ser Gln
35 40 45

Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser Leu His Arg
50 55 60

Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro Ala Ser Tyr
65 70 75 80

Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val Ser Leu Gln
85 90 95

Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
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Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg Leu His Thr
1 5 10 15

Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp Val Leu Ser
20 25 30

Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys Pro Asn Gln
35 40 45

Thr Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser Leu His Arg
50 55 60

Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro Ala Ser Tyr
65 70 75 80

Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val Ser Leu Gln
85 90 95

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Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
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<400> 24

Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg Leu His Thr
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Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp Val Leu Ser
20 25 30

Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys Pro Ser Asn
35 40 45

Phe Thr Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser Leu His Arg
50 55 60

Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro Ala Ser Tyr
65 70 75 80

Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val Ser Leu Gln
85 90 95

Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
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Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg Leu His Thr
1 5 10 15

Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp Val Leu Ser
20 25 30

Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys Pro Ser Gln
35 40 45

Asn Arg Thr Ala Asn Met His Ala Gln Ile Lys Thr Ser Leu His Arg
50 55 60

NGMB-139WO+SeqList_ST25+(4039777v1)

Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro Ala Ser Tyr
65 70 75 80

Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val Ser Leu Gln
85 90 95

Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
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Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg Leu His Thr
1 5 10 15

Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp Val Leu Ser
20 25 30

Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys Pro Ser Gln
35 40 45

Phe Asn Ala Thr Asn Met His Ala Gln Ile Lys Thr Ser Leu His Arg
50 55 60

Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro Ala Ser Tyr
65 70 75 80

Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val Ser Leu Gln
85 90 95

Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
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Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg Leu His Thr
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Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp Val Leu Ser
20 25 30

NGMB-139WO+SeqList_ST25+(4039777v1)

Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys Pro Ser Gln
35 40 45

Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Asn Leu Thr Arg
50 55 60

Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro Ala Ser Tyr
65 70 75 80

Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val Ser Leu Gln
85 90 95

Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
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Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg Leu His Thr
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Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp Val Leu Ser
20 25 30

Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys Pro Ser Gln
35 40 45

Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser Asn His Thr
50 55 60

Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro Ala Ser Tyr
65 70 75 80

Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val Ser Leu Gln
85 90 95

Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
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NGMB-139WO+SeqList_ST25+(4039777v1)

Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg Leu His Thr
1 5 10 15

Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp Val Leu Ser
20 25 30

Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys Pro Ser Gln
35 40 45

Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser Leu His Arg
50 55 60

Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro Ala Asn Tyr
65 70 75 80

Thr Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val Ser Leu Gln
85 90 95

Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
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<400> 30

Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg Leu His Thr
1 5 10 15

Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp Val Leu Ser
20 25 30

Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys Pro Ser Gln
35 40 45

Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser Leu His Arg
50 55 60

Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro Ala Ser Tyr
65 70 75 80

Asn Pro Met Val Leu Ile Gln Asn Thr Thr Thr Gly Val Ser Leu Gln
85 90 95

Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
100 105

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NGMB-139WO+SeqList_ST25+(4039777v1)

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Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg Leu His Thr
 1 5 10 15

Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp Val Leu Ser
 20 25 30

Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys Pro Ser Gln
 35 40 45

Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser Leu His Arg
 50 55 60

Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro Ala Ser Tyr
 65 70 75 80

Asn Pro Met Val Leu Ile Gln Lys Thr Asn Thr Thr Val Ser Leu Gln
 85 90 95

Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
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Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg Leu His Thr
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Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp Val Leu Ser
 20 25 30

Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys Pro Ser Gln
 35 40 45

Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser Leu His Arg
 50 55 60

Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro Ala Ser Tyr
 65 70 75 80

Asn Pro Met Val Leu Ile Gln Lys Thr Asp Asn Gly Thr Ser Leu Gln
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Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
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Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg Leu His Thr
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Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp Val Leu Ser
20 25 30

Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys Pro Ser Gln
35 40 45

Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser Leu His Arg
50 55 60

Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro Ala Ser Tyr
65 70 75 80

Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Asn Ser Thr Gln
85 90 95

Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
100 105

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<400> 34

Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg Leu His Thr
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Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp Val Leu Ser
20 25 30

Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys Pro Ser Gln
35 40 45

Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser Leu His Arg
Page 19

50

55

60

Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro Ala Ser Tyr
65 70 75 80

Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val Asn Leu Thr
85 90 95

Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
100 105

<210> 35

<211> 109

<212> PRT

<213> Artificial sequence

<220>

<223> synthetic polypeptide sequence

<400> 35

Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg Leu His Thr
1 5 10 15

Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp Val Leu Ser
20 25 30

Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys Pro Ser Gln
35 40 45

Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser Leu His Arg
50 55 60

Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro Ala Ser Tyr
65 70 75 80

Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val Ser Leu Gln
85 90 95

Thr Tyr Asp Asp Leu Leu Asn Lys Thr Cys His Cys Ile
100 105

<210> 36

<211> 4

<212> PRT

<213> Artificial sequence

<220>

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<400> 36

Arg Gly Arg Arg
1

<210> 37

<211> 6
 <212> PRT
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 <220>
 <223> synthetic polypeptide sequence
 <400> 37

Arg Lys Arg Lys Lys Arg
 1 5

<210> 38
 <211> 4
 <212> PRT
 <213> Artificial sequence
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 <223> synthetic polypeptide sequence
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Arg Lys Lys Arg
 1

<210> 39
 <211> 6
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 <213> Artificial sequence
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 <400> 39

Arg Arg Arg Lys Lys Arg
 1 5

<210> 40
 <211> 4
 <212> PRT
 <213> Artificial sequence
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 <223> synthetic polypeptide sequence
 <400> 40

Gly Gly Gly Ser
 1

<210> 41
 <211> 5
 <212> PRT
 <213> Artificial sequence
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 <400> 41

Gly Gly Gly Gly Ser
 1 5

<210> 42
 <211> 4
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 <400> 42

Gly Gly Ser Gly
 1

<210> 43
 <211> 5
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 <400> 43

Gly Gly Ser Gly Gly
 1 5

<210> 44
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 <400> 44

Gly Ser Gly Ser Gly
 1 5

<210> 45
 <211> 5
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 <223> synthetic polypeptide sequence
 <400> 45

Gly Ser Gly Gly Gly
 1 5

<210> 46
 <211> 5
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 <223> synthetic polypeptide sequence
 <400> 46

Gly Gly Gly Ser Gly

1

5

<210> 47
 <211> 5
 <212> PRT
 <213> Artificial sequence

<220>
 <223> synthetic polypeptide sequence

<400> 47

Gly Ser Ser Ser Gly
 1 5

<210> 48
 <211> 12
 <212> PRT
 <213> Artificial sequence

<220>
 <223> synthetic polypeptide sequence

<400> 48

Gly Gly Gly Ser Gly Gly Gly Ser Ile Glu Gly Arg
 1 5 10

<210> 49
 <211> 5
 <212> PRT
 <213> Artificial sequence

<220>
 <223> synthetic polypeptide sequence

<400> 49

Gly Gly Gly Gly Gly
 1 5

<210> 50
 <211> 5
 <212> PRT
 <213> Artificial sequence

<220>
 <223> synthetic polypeptide sequence

<400> 50

Glu Gly Gly Gly Ser
 1 5

<210> 51
 <211> 4
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 <213> Artificial sequence

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NGMB-139WO+SeqList_ST25+(4039777v1)

<220>
 <221> MISC_FEATURE
 <222> (2)..(3)
 <223> the amino acid at this position may be any amino acid

<220>
 <221> MISC_FEATURE
 <222> (4)..(4)
 <223> the amino acid at this position may be any hydrophobic amino acid

<400> 51

Pro Xaa Xaa Xaa
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<210> 52
 <211> 5
 <212> PRT
 <213> Artificial sequence

<220>
 <223> synthetic polypeptide sequence

<220>
 <221> MISC_FEATURE
 <222> (2)..(3)
 <223> the amino acid at this position may be any amino acid

<220>
 <221> MISC_FEATURE
 <222> (4)..(4)
 <223> the amino acid at this position may any hydrophobic amino acid

<220>
 <221> MISC_FEATURE
 <222> (5)..(5)
 <223> the amino acid at this position may be Ser or Thr

<400> 52

Pro Xaa Xaa Xaa Xaa
 1 5

<210> 53
 <211> 6
 <212> PRT
 <213> Artificial sequence

<220>
 <223> synthetic polypeptide sequence

<220>
 <221> MISC_FEATURE
 <222> (2)..(2)
 <223> the amino acid at this position may be Leu or Gln

<400> 53

Pro Xaa Gly Met Thr Ser
 1 5

<210> 54
 <211> 5

<212> PRT
<213> Artificial sequence

<220>
<223> synthetic polypeptide sequence

<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> the amino acid at this position may be Leu or Gln

<400> 54

Pro Xaa Gly Met Thr
1 5

<210> 55
<211> 10
<212> PRT
<213> Artificial sequence

<220>
<223> synthetic polypeptide sequence

<400> 55

Cys Gly Leu Val Pro Ala Gly Ser Gly Pro
1 5 10

<210> 56
<211> 12
<212> PRT
<213> Artificial sequence

<220>
<223> synthetic polypeptide sequence

<400> 56

Ser Leu Leu Lys Ser Arg Met Val Pro Asn Phe Asn
1 5 10

<210> 57
<211> 12
<212> PRT
<213> Artificial sequence

<220>
<223> synthetic polypeptide sequence

<400> 57

Ser Leu Leu Ile Ala Arg Arg Met Pro Asn Phe Asn
1 5 10

<210> 58
<211> 12
<212> PRT
<213> Artificial sequence

<220>
<223> synthetic polypeptide sequence

<400> 58

Ser Lys Leu Val Gln Ala Ser Ala Ser Gly Val Asn
1 5 10

<210> 59

<211> 12

<212> PRT

<213> Artificial sequence

<220>

<223> synthetic polypeptide sequence

<400> 59

Ser Ser Tyr Leu Lys Ala Ser Asp Ala Pro Asp Asn
1 5 10

<210> 60

<211> 12

<212> PRT

<213> Artificial sequence

<220>

<223> synthetic polypeptide sequence

<400> 60

Arg Pro Lys Pro Gln Gln Phe Phe Gly Leu Met Asn
1 5 10

<210> 61

<211> 12

<212> PRT

<213> Artificial sequence

<220>

<223> synthetic polypeptide sequence

<400> 61

Ser Leu Arg Pro Leu Ala Leu Trp Arg Ser Phe Asn
1 5 10

<210> 62

<211> 12

<212> PRT

<213> Artificial sequence

<220>

<223> synthetic polypeptide sequence

<400> 62

Ser Pro Gln Gly Ile Ala Gly Gln Arg Asn Phe Asn
1 5 10

<210> 63

<211> 14

<212> PRT

<213> Artificial sequence

<220>

<223> synthetic polypeptide sequence

<400> 63

Asp Val Asp Glu Arg Asp Val Arg Gly Phe Ala Ser Phe Leu
1 5 10

<210> 64

<211> 12

<212> PRT

<213> Artificial sequence

<220>

<223> synthetic polypeptide sequence

<400> 64

Ser Leu Pro Leu Gly Leu Trp Ala Pro Asn Phe Asn
1 5 10

<210> 65

<211> 12

<212> PRT

<213> Artificial sequence

<220>

<223> synthetic polypeptide sequence

<400> 65

Ser Leu Leu Ile Phe Arg Ser Trp Ala Asn Phe Asn
1 5 10

<210> 66

<211> 12

<212> PRT

<213> Artificial sequence

<220>

<223> synthetic polypeptide sequence

<400> 66

Ser Gly Val Val Ile Ala Thr Val Ile Val Ile Thr
1 5 10

<210> 67

<211> 12

<212> PRT

<213> Artificial sequence

<220>

<223> synthetic polypeptide sequence

<400> 67

Ser Leu Gly Pro Gln Gly Ile Trp Gly Gln Phe Asn
1 5 10

<210> 68

<211> 12

<212> PRT

<213> Artificial sequence

<220>
<223> synthetic polypeptide sequence

<400> 68

Lys Lys Ser Pro Gly Arg Val Val Gly Gly Ser Val
1 5 10

<210> 69
<211> 12
<212> PRT
<213> Artificial sequence

<220>
<223> synthetic polypeptide sequence

<400> 69

Pro Gln Gly Leu Leu Gly Ala Pro Gly Ile Leu Gly
1 5 10

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<211> 31
<212> PRT
<213> Artificial sequence

<220>
<223> synthetic polypeptide sequence

<400> 70

His Gly Pro Glu Gly Leu Arg Val Gly Phe Tyr Glu Ser Asp Val Met
1 5 10 15

Gly Arg Gly His Ala Arg Leu Val His Val Glu Glu Pro His Thr
20 25 30

<210> 71
<211> 12
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<220>
<223> synthetic polypeptide sequence

<400> 71

Gly Pro Gln Gly Leu Ala Gly Gln Arg Gly Ile Val
1 5 10

<210> 72
<211> 12
<212> PRT
<213> Artificial sequence

<220>
<223> synthetic polypeptide sequence

<400> 72

Gly Gly Ser Gly Gln Arg Gly Arg Lys Ala Leu Glu
1 5 10

<210> 73
 <211> 12
 <212> PRT
 <213> Artificial sequence

<220>
 <223> synthetic polypeptide sequence

<400> 73

Ser Leu Ser Ala Leu Leu Ser Ser Asp Ile Phe Asn
 1 5 10

<210> 74
 <211> 12
 <212> PRT
 <213> Artificial sequence

<220>
 <223> synthetic polypeptide sequence

<400> 74

Ser Leu Pro Arg Phe Lys Ile Ile Gly Gly Phe Asn
 1 5 10

<210> 75
 <211> 12
 <212> PRT
 <213> Artificial sequence

<220>
 <223> synthetic polypeptide sequence

<400> 75

Ser Leu Leu Gly Ile Ala Val Pro Gly Asn Phe Asn
 1 5 10

<210> 76
 <211> 12
 <212> PRT
 <213> Artificial sequence

<220>
 <223> synthetic polypeptide sequence

<400> 76

Phe Phe Lys Asn Ile Val Thr Pro Arg Thr Pro Pro
 1 5 10

<210> 77
 <211> 734
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<400> 77

NGMB-139WO+SeqList_ST25+(4039777v1)

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Trp
1 5 10 15

Leu Arg Gly Ala Arg Cys Asp Ala His Lys Ser Glu Val Ala His Arg
20 25 30

Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala
35 40 45

Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val Lys Leu
50 55 60

Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp Glu Ser
65 70 75 80

Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp Lys Leu
85 90 95

Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys
100 105 110

Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln His Lys
115 120 125

Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val Asp Val
130 135 140

Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr
145 150 155 160

Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu
165 170 175

Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln
180 185 190

Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg
195 200 205

Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser
210 215 220

Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val Ala Arg
225 230 235 240

Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser Lys Leu
245 250 255

Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly Asp Leu
260 265 270

NGMB-139WO+SeqList_ST25+(4039777v1)

Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu
275 280 285

Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro
290 295 300

Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp Glu Met
305 310 315 320

Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser Lys Asp
325 330 335

Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly Met Phe
340 345 350

Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val Leu Leu
355 360 365

Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala
370 375 380

Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys
385 390 395 400

Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu
405 410 415

Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg
420 425 430

Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val Glu Val
435 440 445

Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His Pro Glu
450 455 460

Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val Leu Asn
465 470 475 480

Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg Val Thr
485 490 495

Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala
500 505 510

Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr
515 520 525

Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln
530 535 540

NGMB-139WO+SeqList_ST25+(4039777v1)

Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys Pro Lys
545 550 555 560

Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe
565 570 575

Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu
580 585 590

Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu Gly
595 600 605

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Arg
610 615 620

Asn Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg Leu His
625 630 635 640

Thr Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp Val Leu
645 650 655

Ser Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys Pro Ser
660 665 670

Gln Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser Leu His
675 680 685

Arg Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro Ala Ser
690 695 700

Tyr Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val Ser Leu
705 710 715 720

Gln Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
725 730

<210> 78
<211> 731
<212> PRT
<213> Artificial sequence

<220>
<223> synthetic polypeptide sequence

<400> 78

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Trp
1 5 10 15

Leu Arg Gly Ala Arg Cys Asp Ala His Lys Ser Glu Val Ala His Arg
20 25 30

Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala
35 40 45

NGMB-139WO+SeqList_ST25+(4039777v1)

Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val Lys Leu
 50 55 60
 Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp Glu Ser
 65 70 75 80
 Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp Lys Leu
 85 90 95
 Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys
 100 105 110
 Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln His Lys
 115 120 125
 Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val Asp Val
 130 135 140
 Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr
 145 150 155 160
 Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu
 165 170 175
 Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln
 180 185 190
 Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg
 195 200 205
 Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser
 210 215 220
 Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val Ala Arg
 225 230 235 240
 Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser Lys Leu
 245 250 255
 Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly Asp Leu
 260 265 270
 Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu
 275 280 285
 Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro
 290 295 300
 Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp Glu Met
 305 310 315 320

NGMB-139WO+SeqList_ST25+(4039777v1)

Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser Lys Asp
325 330 335

Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly Met Phe
340 345 350

Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val Leu Leu
355 360 365

Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala
370 375 380

Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys
385 390 395 400

Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu
405 410 415

Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg
420 425 430

Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val Glu Val
435 440 445

Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His Pro Glu
450 455 460

Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val Leu Asn
465 470 475 480

Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg Val Thr
485 490 495

Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala
500 505 510

Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr
515 520 525

Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln
530 535 540

Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys Pro Lys
545 550 555 560

Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe
565 570 575

Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu
580 585 590

NGMB-139WO+SeqList_ST25+(4039777v1)

Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu Gly
595 600 605

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Asp
610 615 620

His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg Leu His Thr Val Arg
625 630 635 640

Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp Val Leu Ser Pro Arg
645 650 655

Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys Pro Ser Gln Phe Arg
660 665 670

Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser Leu His Arg Leu Lys
675 680 685

Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro Ala Ser Tyr Asn Pro
690 695 700

Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val Ser Leu Gln Thr Tyr
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Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile
725 730

<210> 79
<211> 741
<212> PRT
<213> Artificial sequence

<220>
<223> synthetic polypeptide sequence
<400> 79

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Trp
1 5 10 15

Leu Arg Gly Ala Arg Cys Asp Ala His Lys Ser Glu Val Ala His Arg
20 25 30

Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala
35 40 45

Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val Lys Leu
50 55 60

Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp Glu Ser
65 70 75 80

NGMB-139WO+SeqList_ST25+(4039777v1)

Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp Lys Leu
85 90 95

Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys
100 105 110

Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln His Lys
115 120 125

Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val Asp Val
130 135 140

Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr
145 150 155 160

Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu
165 170 175

Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln
180 185 190

Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg
195 200 205

Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser
210 215 220

Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val Ala Arg
225 230 235 240

Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser Lys Leu
245 250 255

Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly Asp Leu
260 265 270

Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu
275 280 285

Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro
290 295 300

Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp Glu Met
305 310 315 320

Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser Lys Asp
325 330 335

Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly Met Phe
340 345 350

NGMB-139WO+SeqList_ST25+(4039777v1)

Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val Leu Leu
 355 360 365
 Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala
 370 375 380
 Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys
 385 390 395 400
 Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu
 405 410 415
 Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg
 420 425 430
 Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val Glu Val
 435 440 445
 Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His Pro Glu
 450 455 460
 Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val Leu Asn
 465 470 475 480
 Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg Val Thr
 485 490 495
 Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala
 500 505 510
 Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr
 515 520 525
 Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln
 530 535 540
 Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys Pro Lys
 545 550 555 560
 Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe
 565 570 575
 Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu
 580 585 590
 Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu Gly
 595 600 605
 Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
 610 615 620

Gly Gly Ser Gly Gly Gly Gly Ser Gly Asp His Cys Pro Leu Gly Pro
625 630 635 640

Gly Arg Cys Cys Arg Leu His Thr Val Arg Ala Ser Leu Glu Asp Leu
645 650 655

Gly Trp Ala Asp Trp Val Leu Ser Pro Arg Glu Val Gln Val Thr Met
660 665 670

Cys Ile Gly Ala Cys Pro Ser Gln Phe Arg Ala Ala Asn Met His Ala
675 680 685

Gln Ile Lys Thr Ser Leu His Arg Leu Lys Pro Asp Thr Val Pro Ala
690 695 700

Pro Cys Cys Val Pro Ala Ser Tyr Asn Pro Met Val Leu Ile Gln Lys
705 710 715 720

Thr Asp Thr Gly Val Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala Lys
725 730 735

Asp Cys His Cys Ile
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<210> 80

<211> 738

<212> PRT

<213> Artificial sequence

<220>

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<400> 80

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Leu Arg Gly Ala Arg Cys Asp Ala His Lys Ser Glu Val Ala His Arg
20 25 30

Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala
35 40 45

Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val Lys Leu
50 55 60

Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp Glu Ser
65 70 75 80

Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp Lys Leu
85 90 95

Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys
100 105 110

NGMB-139WO+SeqList_ST25+(4039777v1)

Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln His Lys
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 Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val Asp Val
 130 135 140
 Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr
 145 150 155 160
 Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu
 165 170 175
 Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln
 180 185 190
 Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg
 195 200 205
 Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser
 210 215 220
 Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val Ala Arg
 225 230 235 240
 Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser Lys Leu
 245 250 255
 Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly Asp Leu
 260 265 270
 Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu
 275 280 285
 Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro
 290 295 300
 Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp Glu Met
 305 310 315 320
 Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser Lys Asp
 325 330 335
 Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly Met Phe
 340 345 350
 Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val Leu Leu
 355 360 365
 Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala
 370 375 380

NGMB-139WO+SeqList_ST25+(4039777v1)

Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys
385 390 395 400

Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu
405 410 415

Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg
420 425 430

Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val Glu Val
435 440 445

Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His Pro Glu
450 455 460

Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val Leu Asn
465 470 475 480

Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg Val Thr
485 490 495

Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala
500 505 510

Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr
515 520 525

Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln
530 535 540

Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys Pro Lys
545 550 555 560

Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe
565 570 575

Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu
580 585 590

Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu Gly
595 600 605

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
610 615 620

Gly Gly Ser Gly Gly Gly Gly Ser Cys Pro Leu Gly Pro Gly Arg Cys
625 630 635 640

Cys Arg Leu His Thr Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala
645 650 655

NGMB-139WO+SeqList_ST25+(4039777v1)

Asp Trp Val Leu Ser Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly
660 665 670

Ala Cys Pro Ser Gln Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys
675 680 685

Thr Ser Leu His Arg Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys
690 695 700

Val Pro Ala Ser Tyr Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr
705 710 715 720

Gly Val Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His
725 730 735

Cys Ile

<210> 81

<211> 134

<212> PRT

<213> Artificial sequence

<220>

<223> synthetic polypeptide sequence

<400> 81

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
1 5 10 15

Leu Arg Gly Ala Arg Cys Ala Arg Asn Gly Thr His Cys Pro Leu Gly
20 25 30

Pro Gly Arg Cys Cys Arg Leu His Thr Val Asn Ala Ser Leu Glu Asp
35 40 45

Leu Gly Trp Ala Asp Trp Val Leu Ser Pro Arg Glu Val Gln Val Thr
50 55 60

Met Cys Ile Gly Ala Cys Pro Ser Gln Phe Arg Ala Ala Asn Met His
65 70 75 80

Ala Gln Ile Lys Thr Ser Leu His Arg Leu Lys Pro Asp Thr Val Pro
85 90 95

Ala Pro Cys Cys Val Pro Ala Ser Tyr Asn Pro Met Val Leu Ile Gln
100 105 110

Lys Thr Asp Thr Gly Val Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala
115 120 125

Lys Asp Cys His Cys Ile
130

<210> 82
<211> 134
<212> PRT
<213> Artificial sequence

<220>
<223> synthetic polypeptide sequence

<400> 82

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Trp
1 5 10 15

Leu Arg Gly Ala Arg Cys Ala Arg Asn Gly Asp His Cys Pro Leu Gly
20 25 30

Pro Gly Arg Cys Cys Asn Leu Thr Thr Val Arg Ala Ser Leu Glu Asp
35 40 45

Leu Gly Trp Ala Asp Trp Val Leu Ser Pro Arg Glu Val Gln Val Thr
50 55 60

Met Cys Ile Gly Ala Cys Pro Ser Gln Phe Arg Ala Ala Asn Met His
65 70 75 80

Ala Gln Ile Lys Thr Ser Leu His Arg Leu Lys Pro Asp Thr Val Pro
85 90 95

Ala Pro Cys Cys Val Pro Ala Ser Tyr Asn Pro Met Val Leu Ile Gln
100 105 110

Lys Thr Asp Thr Gly Val Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala
115 120 125

Lys Asp Cys His Cys Ile
130

<210> 83
<211> 134
<212> PRT
<213> Artificial sequence

<220>
<223> synthetic polypeptide sequence

<400> 83

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Trp
1 5 10 15

Leu Arg Gly Ala Arg Cys Ala Arg Asn Gly Asp His Cys Pro Leu Gly
20 25 30

NGMB-139WO+SeqList_ST25+(4039777v1)

Pro Gly Arg Cys Cys Arg Leu His Thr Val Arg Ala Asn Leu Thr Asp
35 40 45

Leu Gly Trp Ala Asp Trp Val Leu Ser Pro Arg Glu Val Gln Val Thr
50 55 60

Met Cys Ile Gly Ala Cys Pro Ser Gln Phe Arg Ala Ala Asn Met His
65 70 75 80

Ala Gln Ile Lys Thr Ser Leu His Arg Leu Lys Pro Asp Thr Val Pro
85 90 95

Ala Pro Cys Cys Val Pro Ala Ser Tyr Asn Pro Met Val Leu Ile Gln
100 105 110

Lys Thr Asp Thr Gly Val Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala
115 120 125

Lys Asp Cys His Cys Ile
130

<210> 84
<211> 134
<212> PRT
<213> Artificial sequence

<220>
<223> synthetic polypeptide sequence

<400> 84

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Trp
1 5 10 15

Leu Arg Gly Ala Arg Cys Ala Arg Asn Gly Asp His Cys Pro Leu Gly
20 25 30

Pro Gly Arg Cys Cys Arg Leu His Thr Val Arg Ala Ser Asn Glu Thr
35 40 45

Leu Gly Trp Ala Asp Trp Val Leu Ser Pro Arg Glu Val Gln Val Thr
50 55 60

Met Cys Ile Gly Ala Cys Pro Ser Gln Phe Arg Ala Ala Asn Met His
65 70 75 80

Ala Gln Ile Lys Thr Ser Leu His Arg Leu Lys Pro Asp Thr Val Pro
85 90 95

Ala Pro Cys Cys Val Pro Ala Ser Tyr Asn Pro Met Val Leu Ile Gln
100 105 110

Lys Thr Asp Thr Gly Val Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala
115 120 125

Lys Asp Cys His Cys Ile
130

<210> 85
<211> 134
<212> PRT
<213> Artificial sequence

<220>
<223> synthetic polypeptide sequence

<400> 85

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
1 5 10 15

Leu Arg Gly Ala Arg Cys Ala Arg Asn Gly Asp His Cys Pro Leu Gly
20 25 30

Pro Gly Arg Cys Cys Arg Leu His Thr Val Arg Ala Ser Leu Glu Asp
35 40 45

Leu Gly Trp Ala Asp Trp Val Leu Ser Pro Arg Glu Val Gln Val Thr
50 55 60

Met Cys Ile Gly Ala Cys Pro Asn Gln Thr Arg Ala Ala Asn Met His
65 70 75 80

Ala Gln Ile Lys Thr Ser Leu His Arg Leu Lys Pro Asp Thr Val Pro
85 90 95

Ala Pro Cys Cys Val Pro Ala Ser Tyr Asn Pro Met Val Leu Ile Gln
100 105 110

Lys Thr Asp Thr Gly Val Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala
115 120 125

Lys Asp Cys His Cys Ile
130

<210> 86
<211> 134
<212> PRT
<213> Artificial sequence

<220>
<223> synthetic polypeptide sequence

<400> 86

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
1 5 10 15

Leu Arg Gly Ala Arg Cys Ala Arg Asn Gly Asp His Cys Pro Leu Gly
20 25 30

NGMB-139WO+SeqList_ST25+(4039777v1)

Pro Gly Arg Cys Cys Arg Leu His Thr Val Arg Ala Ser Leu Glu Asp
35 40 45

Leu Gly Trp Ala Asp Trp Val Leu Ser Pro Arg Glu Val Gln Val Thr
50 55 60

Met Cys Ile Gly Ala Cys Pro Ser Asn Phe Thr Ala Ala Asn Met His
65 70 75 80

Ala Gln Ile Lys Thr Ser Leu His Arg Leu Lys Pro Asp Thr Val Pro
85 90 95

Ala Pro Cys Cys Val Pro Ala Ser Tyr Asn Pro Met Val Leu Ile Gln
100 105 110

Lys Thr Asp Thr Gly Val Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala
115 120 125

Lys Asp Cys His Cys Ile
130

<210> 87

<211> 134

<212> PRT

<213> Artificial sequence

<220>

<223> synthetic polypeptide sequence

<400> 87

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Trp
1 5 10 15

Leu Arg Gly Ala Arg Cys Ala Arg Asn Gly Asp His Cys Pro Leu Gly
20 25 30

Pro Gly Arg Cys Cys Arg Leu His Thr Val Arg Ala Ser Leu Glu Asp
35 40 45

Leu Gly Trp Ala Asp Trp Val Leu Ser Pro Arg Glu Val Gln Val Thr
50 55 60

Met Cys Ile Gly Ala Cys Pro Ser Gln Asn Arg Thr Ala Asn Met His
65 70 75 80

Ala Gln Ile Lys Thr Ser Leu His Arg Leu Lys Pro Asp Thr Val Pro
85 90 95

Ala Pro Cys Cys Val Pro Ala Ser Tyr Asn Pro Met Val Leu Ile Gln
100 105 110

NGMB-139WO+SeqList_ST25+(4039777v1)

Lys Thr Asp Thr Gly Val Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala
115 120 125

Lys Asp Cys His Cys Ile
130

<210> 88
<211> 134
<212> PRT
<213> Artificial sequence

<220>
<223> synthetic polypeptide sequence

<400> 88

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Trp
1 5 10 15

Leu Arg Gly Ala Arg Cys Ala Arg Asn Gly Asp His Cys Pro Leu Gly
20 25 30

Pro Gly Arg Cys Cys Arg Leu His Thr Val Arg Ala Ser Leu Glu Asp
35 40 45

Leu Gly Trp Ala Asp Trp Val Leu Ser Pro Arg Glu Val Gln Val Thr
50 55 60

Met Cys Ile Gly Ala Cys Pro Ser Gln Phe Asn Ala Thr Asn Met His
65 70 75 80

Ala Gln Ile Lys Thr Ser Leu His Arg Leu Lys Pro Asp Thr Val Pro
85 90 95

Ala Pro Cys Cys Val Pro Ala Ser Tyr Asn Pro Met Val Leu Ile Gln
100 105 110

Lys Thr Asp Thr Gly Val Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala
115 120 125

Lys Asp Cys His Cys Ile
130

<210> 89
<211> 134
<212> PRT
<213> Artificial sequence

<220>
<223> synthetic polypeptide sequence

<400> 89

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Trp
1 5 10 15

NGMB-139WO+SeqList_ST25+(4039777v1)

Leu Arg Gly Ala Arg Cys Ala Arg Asn Gly Asp His Cys Pro Leu Gly
20 25 30

Pro Gly Arg Cys Cys Arg Leu His Thr Val Arg Ala Ser Leu Glu Asp
35 40 45

Leu Gly Trp Ala Asp Trp Val Leu Ser Pro Arg Glu Val Gln Val Thr
50 55 60

Met Cys Ile Gly Ala Cys Pro Ser Gln Phe Arg Ala Ala Asn Met His
65 70 75 80

Ala Gln Ile Lys Thr Asn Leu Thr Arg Leu Lys Pro Asp Thr Val Pro
85 90 95

Ala Pro Cys Cys Val Pro Ala Ser Tyr Asn Pro Met Val Leu Ile Gln
100 105 110

Lys Thr Asp Thr Gly Val Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala
115 120 125

Lys Asp Cys His Cys Ile
130

<210> 90

<211> 134

<212> PRT

<213> Artificial sequence

<220>

<223> synthetic polypeptide sequence

<400> 90

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Trp
1 5 10 15

Leu Arg Gly Ala Arg Cys Ala Arg Asn Gly Asp His Cys Pro Leu Gly
20 25 30

Pro Gly Arg Cys Cys Arg Leu His Thr Val Arg Ala Ser Leu Glu Asp
35 40 45

Leu Gly Trp Ala Asp Trp Val Leu Ser Pro Arg Glu Val Gln Val Thr
50 55 60

Met Cys Ile Gly Ala Cys Pro Ser Gln Phe Arg Ala Ala Asn Met His
65 70 75 80

Ala Gln Ile Lys Thr Ser Asn His Thr Leu Lys Pro Asp Thr Val Pro
85 90 95

Ala Pro Cys Cys Val Pro Ala Ser Tyr Asn Pro Met Val Leu Ile Gln
100 105 110

Lys Thr Asp Thr Gly Val Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala
115 120 125

Lys Asp Cys His Cys Ile
130

<210> 91
<211> 134
<212> PRT
<213> Artificial sequence

<220>
<223> synthetic polypeptide sequence

<400> 91

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Trp
1 5 10 15

Leu Arg Gly Ala Arg Cys Ala Arg Asn Gly Asp His Cys Pro Leu Gly
20 25 30

Pro Gly Arg Cys Cys Arg Leu His Thr Val Arg Ala Ser Leu Glu Asp
35 40 45

Leu Gly Trp Ala Asp Trp Val Leu Ser Pro Arg Glu Val Gln Val Thr
50 55 60

Met Cys Ile Gly Ala Cys Pro Ser Gln Phe Arg Ala Ala Asn Met His
65 70 75 80

Ala Gln Ile Lys Thr Ser Leu His Arg Leu Lys Pro Asp Thr Val Pro
85 90 95

Ala Pro Cys Cys Val Pro Ala Asn Tyr Thr Pro Met Val Leu Ile Gln
100 105 110

Lys Thr Asp Thr Gly Val Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala
115 120 125

Lys Asp Cys His Cys Ile
130

<210> 92
<211> 134
<212> PRT
<213> Artificial sequence

<220>
<223> synthetic polypeptide sequence

<400> 92

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Trp
1 5 10 15

NGMB-139WO+SeqList_ST25+(4039777v1)

Leu Arg Gly Ala Arg Cys Ala Arg Asn Gly Asp His Cys Pro Leu Gly
20 25 30

Pro Gly Arg Cys Cys Arg Leu His Thr Val Arg Ala Ser Leu Glu Asp
35 40 45

Leu Gly Trp Ala Asp Trp Val Leu Ser Pro Arg Glu Val Gln Val Thr
50 55 60

Met Cys Ile Gly Ala Cys Pro Ser Gln Phe Arg Ala Ala Asn Met His
65 70 75 80

Ala Gln Ile Lys Thr Ser Leu His Arg Leu Lys Pro Asp Thr Val Pro
85 90 95

Ala Pro Cys Cys Val Pro Ala Ser Tyr Asn Pro Met Val Leu Ile Gln
100 105 110

Asn Thr Thr Thr Gly Val Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala
115 120 125

Lys Asp Cys His Cys Ile
130

<210> 93

<211> 134

<212> PRT

<213> Artificial sequence

<220>

<223> synthetic polypeptide sequence

<400> 93

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Trp
1 5 10 15

Leu Arg Gly Ala Arg Cys Ala Arg Asn Gly Asp His Cys Pro Leu Gly
20 25 30

Pro Gly Arg Cys Cys Arg Leu His Thr Val Arg Ala Ser Leu Glu Asp
35 40 45

Leu Gly Trp Ala Asp Trp Val Leu Ser Pro Arg Glu Val Gln Val Thr
50 55 60

Met Cys Ile Gly Ala Cys Pro Ser Gln Phe Arg Ala Ala Asn Met His
65 70 75 80

Ala Gln Ile Lys Thr Ser Leu His Arg Leu Lys Pro Asp Thr Val Pro
85 90 95

NGMB-139WO+SeqList_ST25+(4039777v1)

Ala Pro Cys Cys Val Pro Ala Ser Tyr Asn Pro Met Val Leu Ile Gln
100 105 110

Lys Thr Asn Thr Thr Val Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala
115 120 125

Lys Asp Cys His Cys Ile
130

<210> 94
<211> 134
<212> PRT
<213> Artificial sequence

<220>
<223> synthetic polypeptide sequence

<400> 94

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Trp
1 5 10 15

Leu Arg Gly Ala Arg Cys Ala Arg Asn Gly Asp His Cys Pro Leu Gly
20 25 30

Pro Gly Arg Cys Cys Arg Leu His Thr Val Arg Ala Ser Leu Glu Asp
35 40 45

Leu Gly Trp Ala Asp Trp Val Leu Ser Pro Arg Glu Val Gln Val Thr
50 55 60

Met Cys Ile Gly Ala Cys Pro Ser Gln Phe Arg Ala Ala Asn Met His
65 70 75 80

Ala Gln Ile Lys Thr Ser Leu His Arg Leu Lys Pro Asp Thr Val Pro
85 90 95

Ala Pro Cys Cys Val Pro Ala Ser Tyr Asn Pro Met Val Leu Ile Gln
100 105 110

Lys Thr Asp Asn Gly Thr Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala
115 120 125

Lys Asp Cys His Cys Ile
130

<210> 95
<211> 134
<212> PRT
<213> Artificial sequence

<220>
<223> synthetic polypeptide sequence

<400> 95

NGMB-139WO+SeqList_ST25+(4039777v1)

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Trp
1 5 10 15

Leu Arg Gly Ala Arg Cys Ala Arg Asn Gly Asp His Cys Pro Leu Gly
20 25 30

Pro Gly Arg Cys Cys Arg Leu His Thr Val Arg Ala Ser Leu Glu Asp
35 40 45

Leu Gly Trp Ala Asp Trp Val Leu Ser Pro Arg Glu Val Gln Val Thr
50 55 60

Met Cys Ile Gly Ala Cys Pro Ser Gln Phe Arg Ala Ala Asn Met His
65 70 75 80

Ala Gln Ile Lys Thr Ser Leu His Arg Leu Lys Pro Asp Thr Val Pro
85 90 95

Ala Pro Cys Cys Val Pro Ala Ser Tyr Asn Pro Met Val Leu Ile Gln
100 105 110

Lys Thr Asp Thr Gly Asn Ser Thr Gln Thr Tyr Asp Asp Leu Leu Ala
115 120 125

Lys Asp Cys His Cys Ile
130

<210> 96

<211> 134

<212> PRT

<213> Artificial sequence

<220>

<223> synthetic polypeptide sequence

<400> 96

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Trp
1 5 10 15

Leu Arg Gly Ala Arg Cys Ala Arg Asn Gly Asp His Cys Pro Leu Gly
20 25 30

Pro Gly Arg Cys Cys Arg Leu His Thr Val Arg Ala Ser Leu Glu Asp
35 40 45

Leu Gly Trp Ala Asp Trp Val Leu Ser Pro Arg Glu Val Gln Val Thr
50 55 60

Met Cys Ile Gly Ala Cys Pro Ser Gln Phe Arg Ala Ala Asn Met His
65 70 75 80

Ala Gln Ile Lys Thr Ser Leu His Arg Leu Lys Pro Asp Thr Val Pro
85 90 95

Ala Pro Cys Cys Val Pro Ala Ser Tyr Asn Pro Met Val Leu Ile Gln
100 105 110

Lys Thr Asp Thr Gly Val Asn Leu Thr Thr Tyr Asp Asp Leu Leu Ala
115 120 125

Lys Asp Cys His Cys Ile
130

<210> 97
<211> 134
<212> PRT
<213> Artificial sequence

<220>
<223> synthetic polypeptide sequence

<400> 97

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
1 5 10 15

Leu Arg Gly Ala Arg Cys Ala Arg Asn Gly Asp His Cys Pro Leu Gly
20 25 30

Pro Gly Arg Cys Cys Arg Leu His Thr Val Arg Ala Ser Leu Glu Asp
35 40 45

Leu Gly Trp Ala Asp Trp Val Leu Ser Pro Arg Glu Val Gln Val Thr
50 55 60

Met Cys Ile Gly Ala Cys Pro Ser Gln Phe Arg Ala Ala Asn Met His
65 70 75 80

Ala Gln Ile Lys Thr Ser Leu His Arg Leu Lys Pro Asp Thr Val Pro
85 90 95

Ala Pro Cys Cys Val Pro Ala Ser Tyr Asn Pro Met Val Leu Ile Gln
100 105 110

Lys Thr Asp Thr Gly Val Ser Leu Gln Thr Tyr Asp Asp Leu Leu Asn
115 120 125

Lys Thr Cys His Cys Ile
130

<210> 98
<211> 70
<212> DNA
<213> Artificial sequence

<220>
<223> synthetic polynucleotide sequence

<400> 98
caccatggac atgaggggtcc ccgctcagct cctggggctc ctgctactct ggctccgagg 60
tgccagatgt 70

<210> 99
<211> 48
<212> DNA
<213> Artificial sequence

<220>
<223> synthetic polynucleotide sequence

<400> 99
cctcgagcgg ccgctagctc atatgcagtg gcagtctttg gctaacaa 48

<210> 100
<211> 131
<212> PRT
<213> Artificial sequence

<220>
<223> synthetic polypeptide sequence

<400> 100

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Trp
1 5 10 15

Leu Arg Gly Ala Arg Cys Gly Asp His Cys Pro Leu Gly Pro Gly Arg
20 25 30

Cys Cys Arg Leu His Thr Val Arg Ala Ser Leu Glu Asp Leu Gly Trp
35 40 45

Ala Asp Trp Val Leu Ser Pro Arg Glu Val Gln Val Thr Met Cys Ile
50 55 60

Gly Ala Cys Pro Ser Gln Phe Arg Ala Ala Asn Met His Ala Gln Ile
65 70 75 80

Lys Thr Ser Leu His Arg Leu Lys Pro Asp Thr Val Pro Ala Pro Cys
85 90 95

Cys Val Pro Ala Ser Tyr Asn Pro Met Val Leu Ile Gln Asn Thr Thr
100 105 110

Thr Gly Val Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys
115 120 125

His Cys Ile
130

<210> 101
<211> 22
<212> PRT
<213> Artificial sequence

NGMB-139WO+SeqList_ST25+(4039777v1)

<220>

<223> synthetic polypeptide sequence

<400> 101

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
1 5 10 15

Leu Arg Gly Ala Arg Cys
20

<210> 102

<211> 48

<212> DNA

<213> Artificial sequence

<220>

<223> synthetic polynucleotide sequence

<400> 102

ctccgaggtg ccagatgtgc gcgcaacggg gaccactgtc cgctcggg

48

<210> 103

<211> 577

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic polypeptide

<400> 103

Asp Ala His Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly Glu
1 5 10 15

Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu Gln
20 25 30

Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu
35 40 45

Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys
50 55 60

Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala Thr Leu
65 70 75 80

Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln Glu Pro
85 90 95

Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro Asn Leu
100 105 110

Pro Arg Leu Val Arg Pro Glu Val Asp Val Met Cys Thr Ala Phe His
115 120 125

NGMB-139WO+SeqList_ST25+(4039777v1)

Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr Leu Tyr Glu Ile Ala Arg
130 135 140

Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu Leu Phe Phe Ala Lys Arg
145 150 155 160

Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln Ala Ala Asp Lys Ala Ala
165 170 175

Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg Asp Glu Gly Lys Ala Ser
180 185 190

Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser Leu Gln Lys Phe Gly Glu
195 200 205

Arg Ala Phe Lys Ala Trp Ala Val Ala Arg Leu Ser Gln Arg Phe Pro
210 215 220

Lys Ala Glu Phe Ala Glu Val Ser Lys Leu Val Thr Asp Leu Thr Lys
225 230 235 240

Val His Thr Glu Cys Cys His Gly Asp Leu Leu Glu Cys Ala Asp Asp
245 250 255

Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln Asp Ser Ile Ser
260 265 270

Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu Leu Glu Lys Ser His
275 280 285

Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro Ala Asp Leu Pro Ser
290 295 300

Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val Cys Lys Asn Tyr Ala
305 310 315 320

Glu Ala Lys Asp Val Phe Leu Gly Met Phe Leu Tyr Glu Tyr Ala Arg
325 330 335

Arg His Pro Asp Tyr Ser Val Val Leu Leu Leu Arg Leu Ala Lys Thr
340 345 350

Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala Ala Ala Asp Pro His Glu
355 360 365

Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys Pro Leu Val Glu Glu Pro
370 375 380

Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu Gly Glu
385 390 395 400

NGMB-139WO+SeqList_ST25+(4039777v1)

Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys Val Pro
405 410 415

Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu Gly Lys
420 425 430

Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met Pro Cys
435 440 445

Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val Leu His
450 455 460

Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr Glu Ser
465 470 475 480

Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp Glu Thr
485 490 495

Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp
500 505 510

Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala
515 520 525

Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu
530 535 540

Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys
545 550 555 560

Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val
565 570 575

Ala

<210> 104

<211> 584

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic polypeptide

<400> 104

Asp Ala His Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly Glu
1 5 10 15

Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu Gln
20 25 30

Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu
35 40 45

NGMB-139WO+SeqList_ST25+(4039777v1)

Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys
 50 55 60
 Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala Thr Leu
 65 70 75 80
 Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln Glu Pro
 85 90 95
 Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro Asn Leu
 100 105 110
 Pro Arg Leu Val Arg Pro Glu Val Asp Val Met Cys Thr Ala Phe His
 115 120 125
 Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr Leu Tyr Glu Ile Ala Arg
 130 135 140
 Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu Leu Phe Phe Ala Lys Arg
 145 150 155 160
 Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln Ala Ala Asp Lys Ala Ala
 165 170 175
 Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg Asp Glu Gly Lys Ala Ser
 180 185 190
 Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser Leu Gln Lys Phe Gly Glu
 195 200 205
 Arg Ala Phe Lys Ala Trp Ala Val Ala Arg Leu Ser Gln Arg Phe Pro
 210 215 220
 Lys Ala Glu Phe Ala Glu Val Ser Lys Leu Val Thr Asp Leu Thr Lys
 225 230 235 240
 Val His Thr Glu Cys Cys His Gly Asp Leu Leu Glu Cys Ala Asp Asp
 245 250 255
 Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln Asp Ser Ile Ser
 260 265 270
 Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu Leu Glu Lys Ser His
 275 280 285
 Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro Ala Asp Leu Pro Ser
 290 295 300
 Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val Cys Lys Asn Tyr Ala
 305 310 315 320

NGMB-139WO+SeqList_ST25+(4039777v1)

Glu Ala Lys Asp Val Phe Leu Gly Met Phe Leu Tyr Glu Tyr Ala Arg
325 330 335

Arg His Pro Asp Tyr Ser Val Val Leu Leu Leu Arg Leu Ala Lys Thr
340 345 350

Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala Ala Ala Asp Pro His Glu
355 360 365

Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys Pro Leu Val Glu Glu Pro
370 375 380

Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu Gly Glu
385 390 395 400

Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys Val Pro
405 410 415

Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu Gly Lys
420 425 430

Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met Pro Cys
435 440 445

Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val Leu His
450 455 460

Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr Glu Ser
465 470 475 480

Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp Glu Thr
485 490 495

Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp
500 505 510

Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala
515 520 525

Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu
530 535 540

Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys
545 550 555 560

Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val
565 570 575

Ala Ala Ser Gln Ala Ala Leu Gly
580

<210> 105
 <211> 586
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Synthetic polypeptide

 <400> 105

 Asp Ala His Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly Glu
 1 5 10 15

 Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu Gln
 20 25 30

 Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu
 35 40 45

 Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys
 50 55 60

 Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala Thr Leu
 65 70 75 80

 Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln Glu Pro
 85 90 95

 Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro Asn Leu
 100 105 110

 Pro Arg Leu Val Arg Pro Glu Val Asp Val Met Cys Thr Ala Phe His
 115 120 125

 Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr Leu Tyr Glu Ile Ala Arg
 130 135 140

 Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu Leu Phe Phe Ala Lys Arg
 145 150 155 160

 Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln Ala Ala Asp Lys Ala Ala
 165 170 175

 Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg Asp Glu Gly Lys Ala Ser
 180 185 190

 Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser Leu Gln Lys Phe Gly Glu
 195 200 205

 Arg Ala Phe Lys Ala Trp Ala Val Ala Arg Leu Ser Gln Arg Phe Pro
 210 215 220

NGMB-139WO+SeqList_ST25+(4039777v1)

Lys Ala Glu Phe Ala Glu Val Ser Lys Leu Val Thr Asp Leu Thr Lys
 225 230 235 240
 Val His Thr Glu Cys Cys His Gly Asp Leu Leu Glu Cys Ala Asp Asp
 245 250 255
 Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln Asp Ser Ile Ser
 260 265 270
 Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu Leu Glu Lys Ser His
 275 280 285
 Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro Ala Asp Leu Pro Ser
 290 295 300
 Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val Cys Lys Asn Tyr Ala
 305 310 315 320
 Glu Ala Lys Asp Val Phe Leu Gly Met Phe Leu Tyr Glu Tyr Ala Arg
 325 330 335
 Arg His Pro Asp Tyr Ser Val Val Leu Leu Leu Arg Leu Ala Lys Thr
 340 345 350
 Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala Ala Ala Asp Pro His Glu
 355 360 365
 Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys Pro Leu Val Glu Glu Pro
 370 375 380
 Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu Gly Glu
 385 390 395 400
 Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys Val Pro
 405 410 415
 Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu Gly Lys
 420 425 430
 Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met Pro Cys
 435 440 445
 Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val Leu His
 450 455 460
 Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr Glu Ser
 465 470 475 480
 Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp Glu Thr
 485 490 495

Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp
500 505 510

Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala
515 520 525

Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu
530 535 540

Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys
545 550 555 560

Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val
565 570 575

Ala Ala Ser Gln Ala Ala Leu Gly Leu Gly
580 585

<210> 106
<211> 602
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic polypeptide

<400> 106

Asp Ala His Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly Glu
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Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu Gln
20 25 30

Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu
35 40 45

Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys
50 55 60

Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala Thr Leu
65 70 75 80

Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln Glu Pro
85 90 95

Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro Asn Leu
100 105 110

Pro Arg Leu Val Arg Pro Glu Val Asp Val Met Cys Thr Ala Phe His
115 120 125

Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr Leu Tyr Glu Ile Ala Arg
130 135 140

NGMB-139WO+SeqList_ST25+(4039777v1)

Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu Leu Phe Phe Ala Lys Arg
 145 150 155 160
 Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln Ala Ala Asp Lys Ala Ala
 165 170 175
 Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg Asp Glu Gly Lys Ala Ser
 180 185 190
 Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser Leu Gln Lys Phe Gly Glu
 195 200 205
 Arg Ala Phe Lys Ala Trp Ala Val Ala Arg Leu Ser Gln Arg Phe Pro
 210 215 220
 Lys Ala Glu Phe Ala Glu Val Ser Lys Leu Val Thr Asp Leu Thr Lys
 225 230 235 240
 Val His Thr Glu Cys Cys His Gly Asp Leu Leu Glu Cys Ala Asp Asp
 245 250 255
 Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln Asp Ser Ile Ser
 260 265 270
 Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu Leu Glu Lys Ser His
 275 280 285
 Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro Ala Asp Leu Pro Ser
 290 295 300
 Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val Cys Lys Asn Tyr Ala
 305 310 315 320
 Glu Ala Lys Asp Val Phe Leu Gly Met Phe Leu Tyr Glu Tyr Ala Arg
 325 330 335
 Arg His Pro Asp Tyr Ser Val Val Leu Leu Leu Arg Leu Ala Lys Thr
 340 345 350
 Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala Ala Ala Asp Pro His Glu
 355 360 365
 Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys Pro Leu Val Glu Glu Pro
 370 375 380
 Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu Gly Glu
 385 390 395 400
 Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys Val Pro
 405 410 415

NGMB-139WO+SeqList_ST25+(4039777v1)

Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu Gly Lys
420 425 430

Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met Pro Cys
435 440 445

Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val Leu His
450 455 460

Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr Glu Ser
465 470 475 480

Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp Glu Thr
485 490 495

Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp
500 505 510

Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala
515 520 525

Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu
530 535 540

Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys
545 550 555 560

Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val
565 570 575

Ala Ala Ser Gln Ala Ala Leu Gly Leu Gly Gly Gly Gly Ser Gly Gly
580 585 590

Gly Gly Ser Gly Gly Gly Gly Ser Ala Arg
595 600

<210> 107

<211> 603

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic polypeptide

<400> 107

Asp Ala His Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly Glu
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Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu Gln
20 25 30

Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu
35 40 45

Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys
50 55 60

Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala Thr Leu
65 70 75 80

Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln Glu Pro
85 90 95

Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro Asn Leu
100 105 110

Pro Arg Leu Val Arg Pro Glu Val Asp Val Met Cys Thr Ala Phe His
115 120 125

Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr Leu Tyr Glu Ile Ala Arg
130 135 140

Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu Leu Phe Phe Ala Lys Arg
145 150 155 160

Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln Ala Ala Asp Lys Ala Ala
165 170 175

Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg Asp Glu Gly Lys Ala Ser
180 185 190

Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser Leu Gln Lys Phe Gly Glu
195 200 205

Arg Ala Phe Lys Ala Trp Ala Val Ala Arg Leu Ser Gln Arg Phe Pro
210 215 220

Lys Ala Glu Phe Ala Glu Val Ser Lys Leu Val Thr Asp Leu Thr Lys
225 230 235 240

Val His Thr Glu Cys Cys His Gly Asp Leu Leu Glu Cys Ala Asp Asp
245 250 255

Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln Asp Ser Ile Ser
260 265 270

Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu Leu Glu Lys Ser His
275 280 285

Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro Ala Asp Leu Pro Ser
290 295 300

NGMB-139WO+SeqList_ST25+(4039777v1)

Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val Cys Lys Asn Tyr Ala
 305 310 315 320
 Glu Ala Lys Asp Val Phe Leu Gly Met Phe Leu Tyr Glu Tyr Ala Arg
 325 330 335
 Arg His Pro Asp Tyr Ser Val Val Leu Leu Leu Arg Leu Ala Lys Thr
 340 345 350
 Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala Ala Ala Asp Pro His Glu
 355 360 365
 Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys Pro Leu Val Glu Glu Pro
 370 375 380
 Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu Gly Glu
 385 390 395 400
 Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys Val Pro
 405 410 415
 Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu Gly Lys
 420 425 430
 Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met Pro Cys
 435 440 445
 Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val Leu His
 450 455 460
 Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr Glu Ser
 465 470 475 480
 Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp Glu Thr
 485 490 495
 Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp
 500 505 510
 Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala
 515 520 525
 Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu
 530 535 540
 Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys
 545 550 555 560
 Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val
 565 570 575

Ala Ala Ser Gln Ala Ala Leu Gly Leu Gly Gly Gly Gly Ser Gly Gly
580 585 590

Gly Gly Ser Gly Gly Gly Gly Ser Ala Arg Asn
595 600

<210> 108
<211> 405
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

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agatgtgcgc gcaacgggac tcaactgtccg ctcgggcccgc ggcgttgctg ccgtctgcac 120
acgggtcaacg cgctcgtgga agacctgggc tggggccgatt ggggtgctgtc gccacgggag 180
gtgcaagtga ccatgtgcat cggcgcgctgc ccgagccagt tccgggcggc aaacatgcac 240
gcgcagatca agacgagcct gcaccgcctg aagccccgaca cggtgccagc gccctgctgc 300
gtgcccgcga gctacaatcc catggtgctc attcaaaaga ccgacaccgg ggtgtcgctc 360
cagacctatg atgacttggt agccaaagac tgccactgca tatga 405

<210> 109
<211> 405
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic oligonucleotide

<400> 109
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agatgtgcgc gcaacgggga ccaactgtccg ctcgggcccgc ggcgttgctg caatctgacc 120
acgggtccgcg cgctcgtgga agacctgggc tggggccgatt ggggtgctgtc gccacgggag 180
gtgcaagtga ccatgtgcat cggcgcgctgc ccgagccagt tccgggcggc aaacatgcac 240
gcgcagatca agacgagcct gcaccgcctg aagccccgaca cggtgccagc gccctgctgc 300
gtgcccgcga gctacaatcc catggtgctc attcaaaaga ccgacaccgg ggtgtcgctc 360
cagacctatg atgacttggt agccaaagac tgccactgca tatga 405

<210> 110
<211> 405
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic oligonucleotide

<400> 110
atggacatga ggggtccccgc tcagctcctg ggggtcctgc tactctggct ccgaggtgcc 60
agatgtgcgc gcaacgggga ccaactgtccg ctcgggcccgc ggcgttgctg ccgtctgcac 120

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acggtccgcg cgaacctgac ggacctgggc tgggccgatt ggggtgctgtc gccacgggag	180
gtgcaagtga ccatgtgcat cggcgcgtgc ccgagccagt tccgggcggc aaacatgcac	240
gcgcagatca agacgagcct gcaccgcctg aagcccgaca cggtgccagc gccctgctgc	300
gtgcccgcga gctacaatcc catggtgctc attcaaaaga ccgacaccgg ggtgtcgctc	360
cagacctatg atgacttggt agccaaagac tgccactgca tatga	405

<210> 111
 <211> 405
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Synthetic oligonucleotide

<400> 111	
atggacatga ggggtccccgc tcagtcctg gggctcctgc tactctggct ccgaggtgcc	60
agatgtgctgc gcaacgggga ccactgtccg ctcgggcccgc ggcgttgctg ccgtctgcac	120
acggtccgcg cgtcgaatga aaccctgggc tgggccgatt ggggtgctgtc gccacgggag	180
gtgcaagtga ccatgtgcat cggcgcgtgc ccgagccagt tccgggcggc aaacatgcac	240
gcgcagatca agacgagcct gcaccgcctg aagcccgaca cggtgccagc gccctgctgc	300
gtgcccgcga gctacaatcc catggtgctc attcaaaaga ccgacaccgg ggtgtcgctc	360
cagacctatg atgacttggt agccaaagac tgccactgca tatga	405

<210> 112
 <211> 405
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Synthetic oligonucleotide

<400> 112	
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agatgtgctgc gcaacgggga ccactgtccg ctcgggcccgc ggcgttgctg ccgtctgcac	120
acggtccgcg cgtcgtgga agacctgggc tgggccgatt ggggtgctgtc gccacgggag	180
gtgcaagtga ccatgtgcat cggcgcgtgc ccgaaccaga cccgggcggc aaacatgcac	240
gcgcagatca agacgagcct gcaccgcctg aagcccgaca cggtgccagc gccctgctgc	300
gtgcccgcga gctacaatcc catggtgctc attcaaaaga ccgacaccgg ggtgtcgctc	360
cagacctatg atgacttggt agccaaagac tgccactgca tatga	405

<210> 113
 <211> 405
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Synthetic oligonucleotide

NGMB-139WO+SeqList_ST25+(4039777v1)

<400> 113
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 agatgtgctg gcaacgggga ccactgtccg ctctgggccc ggcgttgctg ccgtctgcac 120
 acgggtccgc cgctcgtgga agacctgggc tgggcccatt ggggtgctgtc gccacgggag 180
 gtgcaagtga ccatgtgcat cggcgcgtgc ccgagcaact tcacggcggc aaacatgcac 240
 gcgcagatca agacgagcct gcaccgcctg aagcccgaca cgggtgccagc gccctgctgc 300
 gtgcccgccca gctacaatcc catggtgctc attcaaaaga ccgacaccgg ggtgtcgtc 360
 cagacctatg atgacttggt agccaaagac tgccactgca tatga 405

<210> 114
 <211> 405
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Synthetic oligonucleotide

<400> 114
 atggacatga ggggtccccgc tcagctcctg gggctcctgc tactctggct ccgaggtgcc 60
 agatgtgctg gcaacgggga ccactgtccg ctctgggccc ggcgttgctg ccgtctgcac 120
 acgggtccgc cgctcgtgga agacctgggc tgggcccatt ggggtgctgtc gccacgggag 180
 gtgcaagtga ccatgtgcat cggcgcgtgc ccgagccaga accggacggc aaacatgcac 240
 gcgcagatca agacgagcct gcaccgcctg aagcccgaca cgggtgccagc gccctgctgc 300
 gtgcccgccca gctacaatcc catggtgctc attcaaaaga ccgacaccgg ggtgtcgtc 360
 cagacctatg atgacttggt agccaaagac tgccactgca tatga 405

<210> 115
 <211> 405
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Synthetic oligonucleotide

<400> 115
 atggacatga ggggtccccgc tcagctcctg gggctcctgc tactctggct ccgaggtgcc 60
 agatgtgctg gcaacgggga ccactgtccg ctctgggccc ggcgttgctg ccgtctgcac 120
 acgggtccgc cgctcgtgga agacctgggc tgggcccatt ggggtgctgtc gccacgggag 180
 gtgcaagtga ccatgtgcat cggcgcgtgc ccgagccagt tcaacgcgac gaacatgcac 240
 gcgcagatca agacgagcct gcaccgcctg aagcccgaca cgggtgccagc gccctgctgc 300
 gtgcccgccca gctacaatcc catggtgctc attcaaaaga ccgacaccgg ggtgtcgtc 360
 cagacctatg atgacttggt agccaaagac tgccactgca tatga 405

<210> 116
 <211> 405
 <212> DNA
 <213> Artificial sequence

<220>

<223> Synthetic oligonucleotide

<400> 116

atggacatga ggggtccccgc tcagctcctg gggctcctgc tactctggct ccgaggtgcc	60
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acgggtccgc cgctcgtgga agacctgggc tgggcccatt ggggtgctgt gccacgggag	180
gtgcaagtga ccatgtgcat cggcgctgtc ccgagccagt tccgggaggc aaacatgcac	240
gctcagatca agacgaacct gacgcgcctg aagcccgaca cgggtgccag gccctgctgc	300
gtgcccgcga gctacaatcc catggtgctc attcaaaaga ccgacaccgg ggtgtcgtc	360
cagacctatg atgacttggt agccaaagac tgccactgca tatga	405

<210> 117

<211> 402

<212> DNA

<213> Artificial sequence

<220>

<223> Synthetic oligonucleotide

<400> 117

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agatgtgctg gcaacgggga ccactgtccg ctctgggccc ggcgttgctg ccgtctgcac	120
acgggtccgc cgctcgtgga agacctgggc tgggcccatt ggggtgctgt gccacgggag	180
gtgcaagtga ccatgtgcat cggcgctgtc ccgagccagt tccgggaggc aaacatgcac	240
gctcagatca agacgagcaa ccacaccctg aagcccgaca cgggtgccag gccctgctgc	300
gtgcccgcga gctacaatcc catggtgctc attcaaaaga ccgacaccgg ggtgtcgtc	360
cagacctatg atgacttggt agccaaagac tgccactgca ta	402

<210> 118

<211> 405

<212> DNA

<213> Artificial sequence

<220>

<223> Synthetic oligonucleotide

<400> 118

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agatgtgctg gcaacgggga ccactgtccg ctctgggccc ggcgttgctg ccgtctgcac	120
acgggtccgc cgctcgtgga agacctgggc tgggcccatt ggggtgctgt gccacgggag	180
gtgcaagtga ccatgtgcat cggcgctgtc ccgagccagt tccgggaggc aaacatgcac	240
gctcagatca agacgagcct gcaccgcctg aagcccgaca cgggtgccag gccctgctgc	300
gtgcccgcga actacactcc catggtgctc attcaaaaga ccgacaccgg ggtgtcgtc	360
cagacctatg atgacttggt agccaaagac tgccactgca tatga	405

NGMB-139WO+SeqList_ST25+(4039777v1)

<210> 119
 <211> 405
 <212> DNA
 <213> Artificial sequence
 <220>
 <223> Synthetic oligonucleotide
 <400> 119
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 agatgtgctg gcaacgggga ccactgtccg ctcggggccc ggcgttgctg ccgtctgcac 120
 acgggtccgc cgctcgtgga agacctgggc tggggccgatt ggggtgctgtc gccacgggag 180
 gtgcaagtga ccatgtgcat cggcgctgct ccgagccagt tccggggcggc aaacatgcac 240
 gcgcagatca agacgagcct gcaccgcctg aagccccgaca cggtgccagc gccctgctgc 300
 gtgcccgccca gctacaatcc catggtgctc attcaaaaca ccaccaccgg ggtgtcgctc 360
 cagacctatg atgacttggt agccaaagac tgccactgca tatga 405

<210> 120
 <211> 405
 <212> DNA
 <213> Artificial sequence
 <220>
 <223> Synthetic oligonucleotide
 <400> 120
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 agatgtgctg gcaacgggga ccactgtccg ctcggggccc ggcgttgctg ccgtctgcac 120
 acgggtccgc cgctcgtgga agacctgggc tggggccgatt ggggtgctgtc gccacgggag 180
 gtgcaagtga ccatgtgcat cggcgctgct ccgagccagt tccggggcggc aaacatgcac 240
 gcgcagatca agacgagcct gcaccgcctg aagccccgaca cggtgccagc gccctgctgc 300
 gtgcccgccca gctacaatcc catggtgctc attcaaaaga ccaacaccac ggtgtcgctc 360
 cagacctatg atgacttggt agccaaagac tgccactgca tatga 405

<210> 121
 <211> 405
 <212> DNA
 <213> Artificial sequence
 <220>
 <223> Synthetic oligonucleotide
 <400> 121
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 agatgtgctg gcaacgggga ccactgtccg ctcggggccc ggcgttgctg ccgtctgcac 120
 acgggtccgc cgctcgtgga agacctgggc tggggccgatt ggggtgctgtc gccacgggag 180
 gtgcaagtga ccatgtgcat cggcgctgct ccgagccagt tccggggcggc aaacatgcac 240
 gcgcagatca agacgagcct gcaccgcctg aagccccgaca cggtgccagc gccctgctgc 300
 gtgcccgccca gctacaatcc catggtgctc attcaaaaga ccgacaacgg gacgtcgctc 360

NGMB-139WO+SeqList_ST25+(4039777v1)

cagacctatg atgacttggt agccaaagac tgccactgca tatga 405

<210> 122
<211> 405
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic oligonucleotide

<400> 122
atggacatga ggggtccccgc tcagctcctg gggctcctgc tactctggct ccgaggtgcc 60
agatgtgctg gcaacgggga ccactgtccg ctctgggccc ggcgttgctg ccgtctgcac 120
acgggtccgcg cgctcgtgga agacctgggc tgggcccatt ggggtgctgtc gccacgggag 180
gtgcaagtga ccatgtgcat cggcgcgtgc ccgagccagt tccgggcggc aaacatgcac 240
gcgcagatca agacgagcct gcaccgcctg aagcccgaca cggtgccagc gccctgctgc 300
gtgcccggca gctacaatcc catggtgctc attcaaaaga ccgacaccgg gaactcgacc 360
cagacctatg atgacttggt agccaaagac tgccactgca tatga 405

<210> 123
<211> 405
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic oligonucleotide

<400> 123
atggacatga ggggtccccgc tcagctcctg gggctcctgc tactctggct ccgaggtgcc 60
agatgtgctg gcaacgggga ccactgtccg ctctgggccc ggcgttgctg ccgtctgcac 120
acgggtccgcg cgctcgtgga agacctgggc tgggcccatt ggggtgctgtc gccacgggag 180
gtgcaagtga ccatgtgcat cggcgcgtgc ccgagccagt tccgggcggc aaacatgcac 240
gcgcagatca agacgagcct gcaccgcctg aagcccgaca cggtgccagc gccctgctgc 300
gtgcccggca gctacaatcc catggtgctc attcaaaaga ccgacaccgg ggtgaacctc 360
acgacctatg atgacttggt agccaaagac tgccactgca tatga 405

<210> 124
<211> 405
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic oligonucleotide

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35 40 45

Leu Gly Trp Ala Asp Trp Val Leu Ser Pro Arg Glu Val Gln Val Thr
50 55 60

Met Cys Ile Gly Ala Cys Pro Ser Gln Phe Arg Ala Ala Asn Met His
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Ala Gln Ile Lys Thr Ser Leu His Arg Leu Lys Pro Asp Thr Val Pro
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Ala Pro Cys Cys Val Pro Ala Ser Tyr Asn Pro Met Val Leu Ile Gln
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