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McWhirter, John
Macdonald, Lynn
Martin, Joel
Murphy, Andrew J.

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Val Pro Leu Ala Arg
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Pro Arg Ser Leu
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Gln Trp Leu Val
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ccaggaagg ggctggagtg gattggggaa atcaatcata gtggaagcac caactacaac	180
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aagctgagct ctgtgaccgc cgcggacacg gctgtgtatt actgtgcggg gcatagccat	300
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Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
35 40 45

Gly Glu Ile Asn His Ser Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys
50 55 60

Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu
65 70 75 80

Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Gly His Ser His Gly Trp Tyr Tyr Tyr Tyr Tyr Gly Met Asp Val Trp
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Gly Gln Gly Thr Thr Val Thr Val Ser Ser
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35 40 45

Gly Glu Ile Asn His Ser Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys
50 55 60

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tccctgaagc tgagctctgt gactgccgcg gacacggccg tgtattactg tgcgaggggg 300
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35 40 45

Trp Ile Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser
50 55 60

Leu Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe
65 70 75 80

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

1900A-WO_SEQ_ST25
 Trp Ile Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser
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Leu Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe
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Cys Ala

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 35 40 45

Trp Ile Gly Ser Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser
 50 55 60

Leu Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe
 65 70 75 80

Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr
 85 90 95

1900A-WO_SEQ_ST25
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Gln Leu Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1 5 10 15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Ser
 20 25 30

Ser Tyr Tyr Trp Gly Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu
 35 40 45

Trp Ile Gly Ser Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser
 50 55 60

Leu Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe
 65 70 75 80

Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr
 85 90 95

Cys Ala Arg

<210> 321
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<220>
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22

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 <212> DNA
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<220>
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<400> 322
 ggaagacatt tgggaaggac tg

22

<210> 323

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<211> 4
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<213> Unknown

<220>
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<222> (3)..(3)
<223> wherein the "Xaa" represents any amino acid

<400> 323

Phe Gly Xaa Gly
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<211> 4
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<213> Unknown

<220>
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<223> wherein the "Xaa" represents any amino acid

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Trp Gly Xaa Gly
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<220>
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<400> 325

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

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Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro
85 90 95

<210> 326
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Gln Gln Ser Tyr Ser Thr Pro
1 5

21

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<211> 7
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<220>
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<400> 327

Gln Gln Ser Tyr Ser Thr Pro
1 5

<210> 328
<211> 21
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<213> Artificial

<220>
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<220>
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<222> (1)..(21)

<400> 328
cac cat agc cac agc acc cac
His His Ser His Ser Thr His
1 5

21

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<220>
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<400> 329

His His Ser His Ser Thr His

1

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 cac cag agc tac agc acc ccc
 His Gln Ser Tyr Ser Thr Pro
 1 5

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<400> 331
 His Gln Ser Tyr Ser Thr Pro
 1 5

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 Gln His Ser Tyr Ser Thr Pro
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 Gln His Ser Tyr Ser Thr Pro
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 Gln Gln Ser His Ser Thr Pro
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 Gln Gln Ser His Ser Thr Pro
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 Gln Gln Ser Tyr Ser Thr His
 1 5

21

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<220>
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<400> 337
 Gln Gln Ser Tyr Ser Thr His
 1 5

<210> 338

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 His His Ser Tyr Ser Thr Pro
 1 5

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His His Ser Tyr Ser Thr Pro
 1 5

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 1 5

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His Gln Ser His Ser Thr Pro
 1 5

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cac cag agc tac agc acc cac
His Gln Ser Tyr Ser Thr His
1 5

21

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<223> Synthetic Construct

<400> 343

His Gln Ser Tyr Ser Thr His
1 5

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<223> Synthetic

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cag cat agc cac agc acc ccc
Gln His Ser His Ser Thr Pro
1 5

21

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<223> Synthetic Construct

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Gln His Ser His Ser Thr Pro
1 5

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<222> (1)..(21)

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Gln His Ser Tyr Ser Thr His
1 5

21

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<400> 347
Gln His Ser Tyr Ser Thr His
1 5

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<220>
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cag cag agc cac agc acc cac
Gln Gln Ser His Ser Thr His
1 5

21

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1 5

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 His His Ser His Ser Thr Pro
 1 5

21

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 1 5

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 1 5

21

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 1 5

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1 5

21

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<400> 355
His Gln Ser His Ser Thr His
1 5

<210> 356
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<220>
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<220>
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cag cat agc cac agc acc cac
Gln His Ser His Ser Thr His
1 5

21

<210> 357
<211> 7
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<220>
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<400> 357
Gln His Ser His Ser Thr His
1 5

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<220>
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45

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 <220>
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 <210> 360
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 <400> 360
 cgaaggtgat cggatgggta ctgtgactat gttgacagta gtaag 45

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 <400> 361
 gccgaaggtg atcggatggg tactgtgact atggtgacag tagtaagttg 50

 <210> 362
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 <220>
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 <400> 362
 tgggcacaac agacaatcgg ctg 23

 <210> 363
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 <220>
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 <400> 363
 ggtggagagg ctattcggc 19

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tgcaactgg atgcagcata g	21
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ggccacattc catgggttc	19
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gcaaacaaaa accactggcc	20
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cacagcttgt gcagcctcc	19

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 <400> 376
 agaagaagcc tgtactacag catccgtttt acagtca 37

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 accatagtca cagtaccca 19

 <210> 378
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 agcagtctgc aacctgaaga ttt 23

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 cccttggccg aagtgat 18

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agtctgcaac ctgaagattt tgc 23

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<400> 382
cccttggccg aagtgat 18

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<211> 108
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<400> 383
Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
1 5 10 15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser
20 25 30
Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
35 40 45
Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
50 55 60
Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
65 70 75 80
Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Pro
85 90 95
Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

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<220>
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<400> 384
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<210> 385

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 <400> 385
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 gccgaacgtc caaggtgagt gaccatggtg atgacagtaa tacactgcaa aatc 54

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 <210> 388
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 <210> 389
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 <220>
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 <400> 389
 aaagagccac cctctcctgc aggg 24

 <210> 390
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 <212> DNA
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 <220>
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 <400> 390

tccaggcacc ctgtctttg	1900A-WO_SEQ_ST25	19	
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 <400> 397
 ccgaacgtcc aagtgagtg 20

<210> 398
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 <400> 398
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 Gln Gln Tyr Gly Ser Ser Pro 21
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<210> 399
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 <400> 399
 Gln Gln Tyr Gly Ser Ser Pro
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 His His His Gly His Ser Pro 21

1

5

<210> 401
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<400> 401

His His His Gly His Ser Pro
 1 5

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<400> 402
 cat cac tat ggt cac tca cct
 His His Tyr Gly His Ser Pro
 1 5

21

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<400> 403

His His Tyr Gly His Ser Pro
 1 5

<210> 404
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<220>
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<400> 404

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr
 20 25 30

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Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Pro
 85 90 95

Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
 100 105

<210> 405
 <211> 50
 <212> DNA
 <213> Artificial

<220>
 <223> Synthetic

<400> 405
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50