

eolf-seq1
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<130> P6031289pct

<150> EP10190705.3

<151> 2010-11-10

<150> US61/412,034

<151> 2010-11-10

<160> 47

<170> PatentIn version 3.3

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<213> Artificial

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Met Glu Ser Val Thr Gly Arg Asp Val Ala Thr Leu Ile Ala Glu Gly
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Ala Ala Lys Met Ser Ala Met Pro Ala Ala Ser Ser Gly Ala Ala Ala
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Gly Val Thr Ala Ser Ala Ala Gly Asp Ala Ala Pro Ala Ala Ala Ala
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Ala Lys Lys Asp Glu Pro Glu Glu Glu Ala Asp Asp Asp Met Gly Pro
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Ser Arg Val Asp Pro Met Gln Tyr Leu Ala Ala Tyr Ala Leu Val Ala
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Met Ser Gly Lys Thr Pro Ser Lys Ala Asp Val Gln Ala Val Leu Lys
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Ala Ala Gly Val Ala Val Asp Ala Ser Arg Val Asp Ala Val Phe Gln
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Glu Val Glu Gly Lys Ser Phe Asp Ala Leu Val Ala Glu Gly Arg Thr
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Ile Val Asn Ser Tyr Val Asn Asp Val Met Glu Arg Ile Cys Met Glu
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Ala Ala Ser Ile Val Arg Ala Asn Lys Lys Arg Thr Leu Gly Ala Arg
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Phe Gln Lys Ser Thr Ser Leu Leu Ile Gln Cys Ala Pro Phe Gln Arg
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Leu Val Arg Gly Val Glu Arg Gln Lys Glu Gly Leu Arg Phe Gln Ser
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Ser Ala Ile Met Ala Leu Gln Glu Ala Thr Glu Ala Tyr Ile Val Ser
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Phe Thr Asn Asn Ala Val Gln Glu Ile Thr Ser Val Leu Asp Ala His
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Arg Val Lys Arg Ala Ala Arg Val Gly Ala Ile Ser Pro Cys Asp Val
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Ile Val Ala Ala Gly Ser Thr Gly Met Glu Pro Thr Gln Thr Ser Phe
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Phe Gln Ala Leu Asn Ile Ala Thr Lys Ile Ala Lys Gly Met Val Glu
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Ile Val Thr Glu Lys Lys Val Leu Ser Val Gly Asp Lys Val Asp Asn
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Gln Val Asn Val Leu Ser Val Trp Asp Arg Gly Val Leu Phe Thr Arg
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 His Pro Tyr Lys Phe Arg Arg Val Lys Glu Leu Met Val Ala Pro Glu
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 Gly Met Phe Thr Gly Gln Ser Val Phe Cys Gly Gln Lys Ala Pro Leu
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 Ala Ile Gly Asn Val Leu Pro Leu Gly Gln Ile Thr Glu Gly Cys Ile
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 Val Cys Asn Val Glu Ala Lys Pro Gly Asp Arg Gly Thr Leu Ala Arg
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 Ala Ser Gly Asp Tyr Cys Ile Ile Ile Ser His Asn His Glu Thr Gly
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 Arg Thr Arg Leu Lys Leu Pro Ser Gly Gln Lys Lys Ser Val Pro Ser
 145 150 155 160
 Thr Ser Arg Ala Met Ile Gly Ile Ile Ser Gly Gly Gly Arg Ile Glu
 165 170 175

eof-f-seq1

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Met Ala Thr His Ser Val Tyr Gly Asn Ala Ser Asp Met Pro Ala Val
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Thr	His	Gly	Met
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Arg Phe Met Arg Trp Pro Thr Phe Val Thr Met Gln Arg Lys Lys Arg
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Val Leu Gln Arg Arg Leu Lys Val Pro Pro Ala Leu Asn Gln Phe Thr
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Lys Val Leu Asp Arg Ala Ser Arg Asn Glu Ala Leu Lys Leu Ile Lys
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Lys Tyr Ala Pro Glu Thr Arg Lys Ala Arg Arg Glu Arg Leu Gln Lys
100 105 110

Val Ala Glu Glu Lys Lys Lys Asp Pro Lys Lys Thr Val Ser Thr Lys
115 120 125

Ala Pro Leu Ala Val Val Thr Gly Leu Gln Glu Val Thr Arg Ala Ile
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135

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Glu Lys Lys Gln Ala Arg Met Val Val Ile Ala Asn Asn Val Asp Pro
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Val Glu Leu Val Leu Trp Met Pro Asn Leu Cys Arg Ala Asn Lys Ile
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Pro Tyr Ala Ile Val Lys Asp Met Ala Arg Leu Gly Asp Ala Ile Gly
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Arg Lys Thr Ala Thr Cys Val Ala Leu Thr Asp Val Asn Ala Glu Asp
195 200 205

Glu Ala Thr Leu Lys Asn Leu Ile Arg Ser Val Asn Ala Arg Phe Leu
210 215 220

Ser Arg Ser Asp Val Ile Arg Arg Gln Trp Gly Gly Leu Gln Leu Ser
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Lys Lys Ile Thr Val Val Arg Cys Glu Gln Leu Asn Ile Ala Gly Thr
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Glu Ile Arg Asn Lys Ile Lys Tyr Leu Gln Tyr Leu Arg Lys Arg Lys
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Leu Thr Asn Pro Thr Lys Gly Pro Phe His His Arg Ala Pro Ser Asp
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Val Phe Val Arg Thr Val Arg Ser Met Leu Pro Arg Tyr Thr Lys Arg
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Gly Met Lys Ala Leu Asn Ser Leu Val Ala Tyr Glu Gly Ile Pro Pro
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Asn Val Val Arg Thr Gly Gly Arg Val Val Ile Pro Arg Ala Gln Arg
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His Val Cys Tyr Arg Ser Glu Arg Pro Tyr Thr Val Leu Gly Asn Met
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Cys Lys His Val Gly Trp Lys Tyr Ser Asp Val Val Ala Asn Leu Glu
 165 170 175

Lys Ala Arg Val Glu Lys Ala Ser Arg His His Glu Lys Gln Ala Lys
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Leu Arg Asp Ala Trp Lys Ser Ala Arg Lys Glu Ala Leu Ala Lys Met
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<213> Leishmania major

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Leu Lys Tyr Ala Leu Asn Ala Arg Glu Gly Glu Met Ile Leu Arg Gln
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Ala Gly Phe Met Asp Val Val Glu Ile Pro Lys Thr Gly Asp Arg Phe
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Arg Leu Met Tyr Asp Val Lys Gly Arg Phe Ala Leu Val Asn Leu Ser
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Glu Ala Glu Ala Gln Ile Lys Leu Met Lys Val Val Asn Leu Tyr Thr
115 120 125

Ala Thr Gly Arg Val Pro Val Ala Val Thr His Asp Gly His Arg Ile

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130

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140

Arg Tyr Pro Asp Pro His Thr Ser Ile Gly Asp Thr Ile Val Tyr Asn
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Val Lys Glu Lys Lys Cys Val Asp Leu Ile Lys Asn Arg Gln Gly Lys
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Ala Val Ile Val Thr Gly Gly Ala Asn Arg Gly Arg Ile Gly Glu Ile
180 185 190

Val Lys Val Glu Cys His Pro Gly Ala Phe Asn Ile Ala His Leu Lys
195 200 205

Asp Ala Ser Gly Ala Glu Phe Ala Thr Arg Ala Ala Asn Ile Phe Val
210 215 220

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

Arg Lys Asn Val Arg Gly Cys Val Leu Ala Ser Asp Ile Ala Leu Val
100 105 110

Asn Val Thr Ile Ser Lys Val Gly Asp Gln Pro Ile Glu Gly Val Thr
115 120 125

Asp Thr Thr Ala Pro Arg Arg Leu Gly Pro Lys Arg Ala Ser Lys Ile
130 135 140

Arg Lys Leu Phe Asn Leu Ser Arg Thr Glu Asp Val Arg Lys Tyr Val
145 150 155 160

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165 170 175

Pro Lys Ile Gln Arg Leu Ile Thr Pro Arg Val Lys Ala Arg Arg Ala
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Lys Lys Ala Lys Asp Ala Ile Ala Lys Val Arg Ala Ser Ala Ala Glu
195 200 205

Arg Arg Glu Tyr Leu Arg Leu Ile Ala Ser Asn Arg Arg Ala Leu Arg
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Phe Lys Ala Gly Met Thr His Ile Val Arg Asp Val Asp Arg Pro Gly 50
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Ser Lys Val Asn Lys Lys Gln Val Val Gln Pro Val Thr Ile Leu Gln 65
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Ala Pro Pro Met Val Ile Val Gly Ile Val Gly Tyr Arg Gln Thr Pro
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Val Gly Leu Lys Thr Ile Gly Thr Val Trp Ala His His Thr Ser Val
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Ala Phe Ser Arg Gln Lys Gln Phe Ala Asn Thr Lys Glu Gly Lys Val
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145 150 155 160

Arg Val Ile Ala His Thr Gln Leu Arg Lys Leu Arg Asn His Arg Val
165 170 175

Gly Val Lys Lys Ala His Val Gln Glu Ile Gln Val Asn Gly Gly Ser
180 185 190

Val Ala Ala Lys Ile Ala Leu Ala Lys Ser Leu Leu Glu Lys Glu Val
195 200 205

Arg Val Asp Ser Val Phe Gln Gln Ser Glu Ala Cys Asp Val Cys Ser
210 215 220

Val Thr Lys Gly His Gly Thr Glu Gly Val Val Lys Arg Trp Gly Val
225 230 235 240

Ala Cys Leu Pro Arg Lys Thr His Arg Gly Leu Arg Lys Val Ala Cys
245 250 255

Ile Gly Ala Trp His Pro Ala Arg Val Met Tyr Thr Val Ala Arg Ala
260 265 270

Gly Gln His Gly Tyr His His Arg Thr Gln Leu Asn Lys Lys Ile Tyr
275 280 285

Gln Ile Gly Arg Ser Val Ala Val Glu Pro Asn Gln Ala Thr Thr Thr
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Tyr Asp Leu Thr Ala Lys Thr Ile Thr Pro Met Gly Gly Phe Val Gly
305 310 315 320

Tyr Gly Thr Val Arg Asn Asp Tyr Val Met Leu Lys Gly Ser Val Ser
325 330 335

Gly Pro Arg Arg Arg Val Met Thr Leu Arg Arg Pro Met Ala Pro Gln
340 345 350

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 Ser Ser Lys Ile Gly His Gly Arg Phe Gln Thr Lys Lys Gln Lys Asn 370 375 380
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Gly Lys Thr Asp Tyr His Ala Arg Arg Gln Met Val Leu Gln Asp Lys
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Thr Lys Phe Gly Ser Pro Lys Tyr Arg Leu Val Val Arg Ile Thr Asn
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Lys Asp Ile Ile Ala Gln Ile Val Gln Ala Lys Ile Val Gly Asp Glu
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Val Val Met Ala Ala Tyr Ala His Glu Leu Pro Ala Phe Gly Ile Glu
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His Gly Leu Thr Asn Tyr Ala Ala Ala Tyr Ala Thr Gly Leu Leu Leu
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Ala Arg Arg Thr Leu Ala Lys Leu Gly Ile Ala Asp Lys Phe Gln Gly
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Ala Lys Glu Ala Asp Gly Ser Tyr Ser Ala Val Arg Thr Lys Lys Asp
 145 150 155 160

Asp Glu Gly Asp Asp Glu Glu Arg Phe Pro Phe Lys Ala Ile Leu Asp
 165 170 175

Val Gly Leu Ala Arg Thr Thr Thr Gly Ala Arg Val Phe Gly Val Leu
 180 185 190

Lys Gly Ala Val Asp Gly Gly Met Ala Val Pro His Arg Pro Asn Arg
 195 200 205

Phe Pro Gly Tyr Asn Lys Glu Lys Ser Ser Leu Asp Ala Lys Val His
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Arg Asp Arg Ile Phe Gly Lys His Val Ala Asp Tyr Leu Lys Gln Val
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 <212> PRT
 <213> Artificial

<220>
 <223> KAAP

<400> 34

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Thr Thr Tyr Glu Glu Phe Ser Ala Lys Leu Asp Arg Leu Gly Glu Glu
 20 25 30

Phe Asn Arg Lys Met Gln Glu Gln Asn Ala Lys Phe Phe Ala Asp Lys
 35 40 45

Pro Asp Glu Ser Thr Leu Ser Pro Glu Met Lys Glu His Tyr Glu Lys
 50 55 60

Phe Glu Arg Met Ile Lys Glu His Thr Glu Lys Phe Asn Lys Lys Met
 65 70 75 80

His Glu His Ser Glu His Phe Lys Gln Lys Phe Ala Glu Leu Leu Glu
 85 90 95

Gln Gln Lys Ala Ala Gln Tyr Pro Ser Lys Gly Gly Ser Ser Arg Pro
 100 105 110

eof-seq1

Met Ser Thr Lys Tyr Leu Ala Ala Tyr Ala Leu Ala Ser Leu Ser Lys
115 120 125

Ala Ser Pro Ser Gln Ala Asp Val Glu Ala Ile Cys Lys Ala Val His
130 135 140

Ile Asp Val Asp Gln Ala Thr Leu Ala Phe Val Met Glu Ser Val Thr
145 150 155 160

Gly Arg Asp Val Ala Thr Leu Ile Ala Glu Gly Ala Ala Lys Met Ser
165 170 175

Ala Met Pro Ala Ala Ser Ser Gly Ala Ala Ala Gly Val Thr Ala Ser
180 185 190

Ala Ala Gly Asp Ala Ala Pro Ala Ala Ala Ala Lys Lys Asp Glu
195 200 205

Pro Glu Glu Glu Ala Asp Asp Asp Met Gly Pro Ser Arg Val Asp Pro
210 215 220

Met Gln Tyr Leu Ala Ala Tyr Ala Leu Val Ala Leu Ser Gly Lys Thr
225 230 235 240

Pro Ser Lys Ala Asp Val Gln Ala Val Leu Lys Ala Ala Gly Val Ala
245 250 255

Val Asp Ala Ser Arg Val Asp Ala Val Phe Gln Glu Val Glu Gly Lys
260 265 270

Ser Phe Asp Ala Leu Val Ala Glu Gly Arg Thr Lys Leu Val Gly Ser
275 280 285

Gly Ser Ala Ala Pro Ala Gly Ala Val Ser Thr Ala Gly Ala Gly Ala
290 295 300

Gly Ala Val Ala Glu Ala Lys Lys Glu Glu Pro Glu Glu Glu Glu Ala
305 310 315 320

Asp Asp Asp Met Gly Pro Val Asp Leu Gln Pro Ala Ala Ala Ala Pro
325 330 335

Ala Ala Pro Ser Ala Ala Ala Lys Glu Glu Pro Glu Glu Ser Asp Glu
340 345 350

Asp Asp Phe Gly Met Gly Gly Leu Phe
355 360

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<211> 30

eolf-seq1

<212> DNA
<213> Artificial

<220>
<223> primer

<400> 35
cccaagctta tggccaccac ctacgaggag

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<210> 36
<211> 22
<212> DNA
<213> Artificial

<220>
<223> primer

<400> 36
cattactgga tctatcaaca gg

22

<210> 37
<211> 297
<212> PRT
<213> homo sapiens

<400> 37

Met Thr Thr Pro Arg Asn Ser Val Asn Gly Thr Phe Pro Ala Glu Pro
1 5 10 15

Met Lys Gly Pro Ile Ala Met Gln Ser Gly Pro Lys Pro Leu Phe Arg
20 25 30

Arg Met Ser Ser Leu Val Gly Pro Thr Gln Ser Phe Phe Met Arg Glu
35 40 45

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

Ala Leu Gly Gly Leu Leu Met Ile Pro Ala Gly Ile Tyr Ala Pro Ile
65 70 75 80

Cys Val Thr Val Trp Tyr Pro Leu Trp Gly Gly Ile Met Tyr Ile Ile
85 90 95

Ser Gly Ser Leu Leu Ala Ala Thr Glu Lys Asn Ser Arg Lys Cys Leu
100 105 110

Val Lys Gly Lys Met Ile Met Asn Ser Leu Ser Leu Phe Ala Ala Ile
115 120 125

Ser Gly Met Ile Leu Ser Ile Met Asp Ile Leu Asn Ile Lys Ile Ser
130 135 140

His Phe Leu Lys Met Glu Ser Leu Asn Phe Ile Arg Ala His Thr Pro
145 150 155 160

eolf-seq1

Tyr Ile Asn Ile Tyr Asn Cys Glu Pro Ala Asn Pro Ser Glu Lys Asn
165 170 175

Ser Pro Ser Thr Gln Tyr Cys Tyr Ser Ile Gln Ser Leu Phe Leu Gly
180 185 190

Ile Leu Ser Val Met Leu Ile Phe Ala Phe Phe Gln Glu Leu Val Ile
195 200 205

Ala Gly Ile Val Glu Asn Glu Trp Lys Arg Thr Cys Ser Arg Pro Lys
210 215 220

Ser Asn Ile Val Leu Leu Ser Ala Glu Glu Lys Lys Glu Gln Thr Ile
225 230 235 240

Glu Ile Lys Glu Glu Val Val Gly Leu Thr Glu Thr Ser Ser Gln Pro
245 250 255

Lys Asn Glu Glu Asp Ile Glu Ile Ile Pro Ile Gln Glu Glu Glu Glu
260 265 270

Glu Glu Thr Glu Thr Asn Phe Pro Glu Pro Pro Gln Asp Gln Glu Ser
275 280 285

Ser Pro Ile Glu Asn Asp Ser Ser Pro
290 295

<210> 38
<211> 498
<212> DNA
<213> Cupressus arizonica

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aagatctcag gatcagagct tgcagacatc ttgcggtcta tgggaagtga agtagacgag 180
gcagagggtca aggccatgat ggaggaggca gacacggatg gtgacggtta tgtagcctg 240
caagagtttg tggatctgaa tattaaggc gctactgtga aggatttgaa gaatgctttc 300
aaagtgtttg atcgggactg taatggcacc atttcgcctg ctgagctgtg cgagactctc 360
aaaagcgtgg gcgagccctg caccatcgag gagtctaaga acattattca caacgtcgac 420
aagaatgggg atggacttat taatgttgaa gaatttcaga caatgatgac aagtgaaatg 480
actgataaga gcaaatga 498

<210> 39
<211> 1044
<212> DNA
<213> Cupressus arizonica

<400> 39

eolf-seq1

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tatggagcaa caagagaaaa agcactttgg ataattttct ctcagaatat gaatataaag	240
ctccagatgc ctttgtatgt taatggatat aagactattg acggcagggg agcagatggt	300
catcttggca atggcggtcc ctgtctgttt atgaggaaag cgagccatgt tattctccat	360
ggtttgcata tacacggttg taatacgagt gttttggggg atgttttggt aagtgagtcc	420
attgggtgtg agcctgttca tgctcaggat ggggacgcca ttactatgcg gaatgttaca	480
aatgcttggga ttgatcataa ttctctctcc gattgttctg atggctttat cgatgttaca	540
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ttgttaggac atgatgatac atatgatgat gacaaatcta tgaaagtgc agtggcgttc	660
aatcaatttg gacccaatgc tgggcaacga atgccaaggg cacgatatgg acttgtacat	720
gttgcaaaca ataattatga tcaatggaat atatatgcta ttggtgggag ttcaaatacca	780
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acaaagcgta taggggtgtga aacaacatca gcttgtgcga actgggtgtg gagatccaca	900
cgagatgctt ttactaatgg agcttatttt gtatcatcgg ggaaagctga agacaccaat	960
atatacaata gtaatgaagc tttcaaagtt gagaatggga atgcagctcc tcaattaaca	1020
caaaatgctg gagttgtagc ataa	1044

<210> 40
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 <212> PRT
 <213> Cupressus arizonica

<400> 40

Met Asp Glu Val Pro Ser Ser Asp Glu Ser Lys Ser Ala Ser Ser Gly
 1 5 10 15

Lys Arg Val Leu Glu Gln Ser Val His Glu Leu Glu Glu Val Phe Lys
 20 25 30

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

Asp Ile Leu Arg Ser Met Gly Ser Glu Val Asp Glu Ala Glu Val Lys
 50 55 60

Ala Met Met Glu Glu Ala Asp Thr Asp Gly Asp Gly Tyr Val Ser Leu
 65 70 75 80

Gln Glu Phe Val Asp Leu Asn Ile Lys Gly Ala Thr Val Lys Asp Leu
 85 90 95

eolf-seq1

Lys Asn Ala Phe Lys Val Phe Asp Arg Asp Cys Asn Gly Thr Ile Ser
100 105 110

Pro Ala Glu Leu Cys Glu Thr Leu Lys Ser Val Gly Glu Pro Cys Thr
115 120 125

Ile Glu Glu Ser Lys Asn Ile Ile His Asn Val Asp Lys Asn Gly Asp
130 135 140

Gly Leu Ile Asn Val Glu Glu Phe Gln Thr Met Met Thr Ser Glu Met
145 150 155 160

Thr Asp Lys Ser Lys
165

<210> 41
<211> 347
<212> PRT
<213> Cupressus arizonica

<400> 41

Ser Asp Asn Pro Ile Asp Ser Cys Trp Arg Gly Asp Ser Asn Trp Asp
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Gln Asn Arg Met Lys Leu Ala Asp Cys Val Val Gly Phe Gly Ser Ser
20 25 30

Thr Met Gly Gly Lys Gly Gly Glu Ile Tyr Thr Val Thr Ser Ser Glu
35 40 45

Asp Asn Pro Val Asn Pro Thr Pro Gly Thr Leu Arg Tyr Gly Ala Thr
50 55 60

Arg Glu Lys Ala Leu Trp Ile Ile Phe Ser Gln Asn Met Asn Ile Lys
65 70 75 80

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

Gly Ala Asp Val His Leu Gly Asn Gly Gly Pro Cys Leu Phe Met Arg
100 105 110

Lys Ala Ser His Val Ile Leu His Gly Leu His Ile His Gly Cys Asn
115 120 125

Thr Ser Val Leu Gly Asp Val Leu Val Ser Glu Ser Ile Gly Val Glu
130 135 140

Pro Val His Ala Gln Asp Gly Asp Ala Ile Thr Met Arg Asn Val Thr
145 150 155 160

Asn Ala Trp Ile Asp His Asn Ser Leu Ser Asp Cys Ser Asp Gly Leu

165 eolf-seql 170 175

Ile Asp Val Thr Leu Gly Ser Thr Gly Ile Thr Ile Ser Asn Asn His
180 185 190

Phe Phe Asn His His Lys Val Met Leu Leu Gly His Asp Asp Thr Tyr
195 200 205

Asp Asp Asp Lys Ser Met Lys Val Thr Val Ala Phe Asn Gln Phe Gly
210 215 220

Pro Asn Ala Gly Gln Arg Met Pro Arg Ala Arg Tyr Gly Leu Val His
225 230 235 240

Val Ala Asn Asn Asn Tyr Asp Gln Trp Asn Ile Tyr Ala Ile Gly Gly
245 250 255

Ser Ser Asn Pro Thr Ile Leu Ser Glu Gly Asn Ser Phe Thr Ala Pro
260 265 270

Asn Glu Ser Tyr Lys Lys Glu Val Thr Lys Arg Ile Gly Cys Glu Thr
275 280 285

Thr Ser Ala Cys Ala Asn Trp Val Trp Arg Ser Thr Arg Asp Ala Phe
290 295 300

Thr Asn Gly Ala Tyr Phe Val Ser Ser Gly Lys Ala Glu Asp Thr Asn
305 310 315 320

Ile Tyr Asn Ser Asn Glu Ala Phe Lys Val Glu Asn Gly Asn Ala Ala
325 330 335

Pro Gln Leu Thr Gln Asn Ala Gly Val Val Ala
340 345

<210> 42
<211> 97
<212> PRT
<213> human

<400> 42

Met Cys Ser Ser Leu Glu Gln Ala Leu Ala Val Leu Val Thr Thr Phe
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His Lys Tyr Ser Cys Gln Glu Gly Asp Lys Phe Lys Leu Ser Lys Gly
20 25 30

Glu Met Lys Glu Leu Leu His Lys Glu Leu Pro Ser Phe Val Gly Glu
35 40 45

Lys Val Asp Glu Glu Gly Leu Lys Lys Leu Met Gly Ser Leu Asp Glu
50 55 60

eolf-seq1

Asn Ser Asp Gln Gln Val Asp Phe Gln Glu Tyr Ala Val Phe Leu Ala
65 70 75 80

Leu Ile Thr Val Met Cys Asn Asp Phe Phe Gln Gly Cys Pro Asp Arg
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Pro

<210> 43
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<212> DNA
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gagctgcccc gctttgtggg ggagaaagtg gatgaggagg ggctgaagaa gctgatgggc 180
agcctggatg agaacagtga ccagcaggtg gacttccagg agtatgctgt tttcctggca 240
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<210> 44
<211> 26
<212> DNA
<213> artificial

<220>
<223> primer

<400> 44
aaggatccat gtgcagttct ctggag 26

<210> 45
<211> 26
<212> DNA
<213> artificial

<220>
<223> primer

<400> 45
aacttaagca gggtcggtct gggcag 26

<210> 46
<211> 1436
<212> DNA
<213> artificial

<220>
<223> Q

<400> 46
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180 gccaaagagg cgtccgcgaa gagcggtccc aagtcgcgga aatgtgtct gatcttccc
 240 gtgggcccgc tccgcgggat gatgcgcgcg gccaggtacg ctgcgcgat cgtgtcctc
 300 ggccgcccca ggaattcaga atctccgtg aagcgcgccg cgcagagcgg gaagaagcgg
 360 tgcgcctga accgcgcac cgtgatgtg gccgcgcgc accagcaga catcgcacg
 420 ctctgaaga acgtgaact gtctcacag gccgttgtg cgaacatag caagcgatg
 480 gcaagaaga aaggcgcga gaagggcaag gcgacacga gccgcgcga attcgatc
 540 tctagacca tctccacca gtacctcgc cgtacgtc tgcctcct gagcaaggcg
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 660 gccaccccg ccttgtgat ggaagcgtt accggacgcg acgtggccac cctgatcgcg
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 900 gcgtacgccc tgcgtgcgt gtctgcgaag accgcgtcga agcggaagt tcaagctgtc
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<210> 47
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 <212> PRT
 <213> artificial
 <220>
 <223> Q
 <400> 47

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Ser Asn Asn Asn Asn Asn Asn Asn Asn Asn Leu Gly Ile Glu Gly
 20
 25
 30

Arg Pro Leu Ala Thr Pro Arg Ser Ala Lys Lys Ala Val Arg Lys Ser
 35
 40
 45

Gly Ser Lys Ser Ala Lys Cys Gly Leu Ile Phe Pro Val Gly Arg Val
 Page 33

coif-seq1
60

50

55

Gly Gly Met Met Arg Arg Gly Gln Tyr Ala Arg Arg Ile Gly Ala Ser
65 70 75 80

Gly Ala Pro Arg Ile Ser Glu Phe Ser Val Lys Ala Ala Ala Gln Ser
85 90 95

Gly Lys Lys Arg Cys Arg Leu Asn Pro Arg Thr Val Met Leu Ala Ala
100 105 110

Arg His Asp Asp Asp Ile Gly Thr Leu Leu Lys Asn Val Thr Leu Ser
115 120 125

His Ser Gly Val Val Pro Asn Ile Ser Lys Ala Met Ala Lys Lys Lys
130 135 140

Gly Gly Lys Lys Gly Lys Ala Thr Pro Ser Ala Pro Glu Phe Gly Ser
145 150 155 160

Ser Arg Pro Met Ser Thr Lys Tyr Leu Ala Ala Tyr Ala Leu Ala Ser
165 170 175

Leu Ser Lys Ala Ser Pro Ser Gln Ala Asp Val Glu Ala Ile Cys Lys
180 185 190

Ala Val His Ile Asp Val Asp Gln Ala Thr Leu Ala Phe Val Met Glu
195 200 205

Ser Val Thr Gly Arg Asp Val Ala Thr Leu Ile Ala Glu Gly Ala Ala
210 215 220

Lys Met Ser Ala Met Pro Ala Ala Ser Ser Gly Ala Ala Ala Gly Val
225 230 235 240

Thr Ala Ser Ala Ala Gly Asp Ala Ala Pro Ala Ala Ala Ala Ala Lys
245 250 255

Lys Asp Glu Pro Glu Glu Glu Ala Asp Asp Asp Met Gly Pro Ser Arg
260 265 270

Val Asp Pro Met Gln Tyr Leu Ala Ala Tyr Ala Leu Val Ala Leu Ser
275 280 285

Gly Lys Thr Pro Ser Lys Ala Asp Val Gln Ala Val Leu Lys Ala Ala
290 295 300

Gly Val Ala Val Asp Ala Ser Arg Val Asp Ala Val Phe Gln Glu Val
305 310 315 320

Glu Gly Lys Ser Phe Asp Ala Leu Val Ala Glu Gly Arg Thr Lys Leu
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									eolf-seq1						
				325					330					335	
Val	Gly	Ser	Gly 340	Ser	Ala	Ala	Pro	Ala 345	Gly	Ala	Val	Ser	Thr 350	Ala	Gly
Ala	Gly	Ala 355	Gly	Ala	Val	Ala	Glu 360	Ala	Lys	Lys	Glu	Glu 365	Pro	Glu	Glu
Glu	Glu 370	Ala	Asp	Asp	Asp	Met 375	Gly	Pro	Val	Asp	Leu 380	Gln	Pro	Ala	Ala
Ala 385	Ala	Pro	Ala	Ala	Pro 390	Ser	Ala	Ala	Ala	Lys 395	Glu	Glu	Pro	Glu	Glu 400
Ser	Asp	Glu	Asp	Asp 405	Phe	Gly	Met	Gly	Gly 410	Leu	Phe				