

eolf-othd-000001
SEQUENCE LISTING

<110> Sandoz AG
Boehringer Ingelheim RCV GmbH & Co KG

<120> Method for producing a recombinant protein of interest

<130> R 65202

<150> EP 12198006.4
<151> 2012-12-19

<160> 12

<170> PatentIn version 3.5

<210> 1
<211> 148
<212> PRT
<213> CSFV

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Met Glu Pro Leu Tyr Asp Lys Asn Gly Ala Val Leu Phe Gly Glu Pro
1 5 10 15

Ser Asp Thr His Pro Gln Ser Thr Leu Lys Leu Pro His Pro Arg Gly
20 25 30

Glu Lys Glu Val Ile Val Gly Ile Arg Asp Leu Pro Arg Lys Gly Asp
35 40 45

Cys Arg Thr Gly Asn Arg Leu Gly Pro Val Ser Gly Leu Phe Val Lys
50 55 60

Pro Gly Pro Val Phe Tyr Gln Asp Tyr Ser Gly Pro Val Tyr His Arg
65 70 75 80

Ala Pro Leu Glu Gln Phe Lys Gln Ala Pro Met Cys Glu Val Thr Lys
85 90 95

Arg Ile Gly Arg Val Thr Gly Ser Asp Gly Asn Leu Tyr His Met Tyr
100 105 110

Val Cys Thr Asp Gly Cys Ile Leu Val Lys Thr Ala Lys Arg Glu Gly
115 120 125

Gln Asp Val Leu Lys Trp Val Tyr Asn Val Leu Asp Ser Pro Ile Trp
130 135 140

Val Thr Ser Cys
145

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eo1f-othd-000001

<400> 2

Met Glu Leu Leu Asn Phe Glu Leu Leu Tyr Lys Thr Tyr Lys Gln Lys
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Pro Ala Gly Val Gln Glu Pro Leu Tyr Asp Lys Asn Gly Ala Val Leu
20 25 30
Phe Gly Glu Pro Ser Asp Thr His Pro Gln Ser Thr Leu Lys Leu Pro
35 40 45
His Pro Arg Gly Glu Lys Glu Val Ile Val Gly Ile Arg Asp Leu Pro
50 55 60
Arg Lys Gly Asp Cys Arg Thr Gly Asn Arg Leu Gly Pro Val Ser Gly
65 70 75 80
Leu Phe Val Lys Pro Gly Pro Val Phe Tyr Gln Asp Tyr Ser Gly Pro
85 90 95
Val Tyr His Arg Ala Pro Leu Glu Gln Phe Lys Gln Ala Pro Met Cys
100 105 110
Glu Val Thr Lys Arg Ile Gly Arg Val Thr Gly Ser Asp Gly Asn Leu
115 120 125
Tyr His Met Tyr Val Cys Thr Asp Gly Cys Ile Leu Val Lys Thr Ala
130 135 140
Lys Arg Glu Gly Gln Asp Val Leu Lys Trp Val Tyr Asn Val Leu Asp
145 150 155 160
Ser Pro Ile Trp Val Ala Ser Cys
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<210> 3

<211> 16

<212> PRT

<213> Artificial Sequence

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<223> model peptide termed pep6His

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<400> 4

Met Glu Pro Leu Tyr Asp Lys Asn Gly Ala Val Leu Phe Gly Glu Pro
Page 2

eo1f-othd-000001

1 5 10 15

Ser Asp Thr His₂₀ Pro Gln Ser Thr Leu₂₅ Lys Leu Pro His₃₀ Pro Arg Gly

Glu Asp Glu₃₅ Val Glu Val Gly₄₀ Ile Arg Asp Leu Pro Arg₄₅ Lys Gly Asp

Cys Arg₅₀ Thr Gly Asn Arg₅₅ Leu₅₅ Gly Pro Val Ser Gly₆₀ Leu Phe Val Lys

Pro Gly₆₅ Pro Val Phe Tyr₇₀ Gln Asp Tyr Ser Gly₇₅ Pro Val Tyr His₈₀ Arg

Ala Pro Leu Glu₈₅ Gln Phe Lys Gln Thr₉₀ Pro Met Glu Glu Thr₉₅ Thr Lys

Arg Ile Gly Arg₁₀₀ Val Thr Gly Ser Asp₁₀₅ Gly Asn Leu Tyr His₁₁₀ Met Tyr

Val Glu Thr₁₁₅ Asp Gly Glu Ile Leu₁₂₀ Val Lys Gln Ala Lys₁₂₅ Arg Glu Gly

Gln Asp₁₃₀ Val Leu Lys Trp Thr₁₃₅ Tyr Asn Thr Leu Asp₁₄₀ Ser Pro Ile Trp

Val₁₄₅ Thr Ser Cys Gln₁₅₀ Pro Asp Ala Ile Asn₁₅₅ Ala Pro Val Thr Cys₁₆₀ Cys

Tyr Asn Phe Thr₁₆₅ Asn Arg Lys Ile Ser Val₁₇₀ Gln Arg Leu Ala Ser₁₇₅ Tyr

Arg Arg Ile Thr₁₈₀ Ser Ser Lys Cys Pro₁₈₅ Lys Glu Ala Val Ile₁₉₀ Phe Lys

Thr Ile Val₁₉₅ Ala Lys Glu Ile Cys₂₀₀ Ala Asp Pro Lys₂₀₅ Gln Lys Trp Val

Gln Asp₂₁₀ Ser Met Asp His₂₁₅ Leu₂₁₅ Asp Lys Gln Thr Gln₂₂₀ Thr Pro Lys Thr

<210> 5
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Met Glu Pro Val Tyr₅ Asp Thr Ala Gly Arg Pro Leu Phe Gly Asn Pro₁₅

Ser Glu Val His₂₀ Pro Gln Ser Thr Leu₂₅ Lys Leu Pro His₃₀ Asp Arg Gly

eo1f-othd-000001

Glu Asp Asp Ile Glu Thr Thr Leu Arg Asp Leu Pro Arg Lys Gly Asp
35 40 45

Cys Arg Ser Gly Asn His Leu Gly Pro Val Ser Gly Ile Tyr Ile Lys
50 55 60

Pro Gly Pro Val Tyr Tyr Gln Asp Tyr Thr Gly Pro Val Tyr His Arg
65 70 75 80

Ala Pro Leu Glu Phe Phe Asp Glu Thr Gln Phe Glu Glu Thr Thr Lys
85 90 95

Arg Ile Gly Arg Val Thr Gly Ser Asp Gly Lys Leu Tyr His Ile Tyr
100 105 110

Val Glu Val Asp Gly Glu Ile Leu Leu Lys Gln Ala Lys Arg Gly Thr
115 120 125

Pro Arg Thr Leu Lys Trp Thr Arg Asn Thr Thr Asn Cys Pro Leu Trp
130 135 140

Val Thr Ser Cys Gln Pro Asp Ala Ile Asn Ala Pro Val Thr Cys Cys
145 150 155 160

Tyr Asn Phe Thr Asn Arg Lys Ile Ser Val Gln Arg Leu Ala Ser Tyr
165 170 175

Arg Arg Ile Thr Ser Ser Lys Cys Pro Lys Glu Ala Val Ile Phe Lys
180 185 190

Thr Ile Val Ala Lys Glu Ile Cys Ala Asp Pro Lys Gln Lys Trp Val
195 200 205

Gln Asp Ser Met Asp His Leu Asp Lys Gln Thr Gln Thr Pro Lys Thr
210 215 220

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

Glu Lys Glu Val Ile Val Gly Ile Arg Asp Leu Pro Arg Lys Gly Asp
35 40 45

eo1f-othd-000001

Cys Arg Thr Gly Asn Arg Leu Gly Pro Val Ser Gly Leu Phe Val Lys
50 55 60

Pro Gly Pro Val Phe Tyr Gln Asp Tyr Ser Gly Pro Val Tyr His Arg
65 70 75 80

Ala Pro Leu Glu Gln Phe Lys Gln Ala Pro Met Cys Glu Val Thr Lys
85 90 95

Arg Ile Gly Arg Val Thr Gly Ser Asp Gly Asn Leu Tyr His Met Tyr
100 105 110

Val Cys Thr Asp Gly Cys Ile Leu Val Lys Thr Ala Lys Arg Glu Gly
115 120 125

Gln Asp Val Leu Lys Trp Val Tyr Asn Val Leu Asp Ser Pro Ile Trp
130 135 140

Val Ala Ser Cys Ser Val Asp Lys Leu Ala Ala Ala Leu Glu His His
145 150 155 160

His His His His

<210> 7
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Met Glu Pro Val Tyr Asp Thr Ala Gly Arg Pro Leu Phe Gly Asn Pro
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Ser Glu Val His Pro Gln Ser Thr Leu Lys Leu Pro His Asp Arg Gly
20 25 30

Glu Asp Asp Ile Glu Thr Thr Leu Arg Asp Leu Pro Arg Lys Gly Asp
35 40 45

Cys Arg Ile Tyr Ile Lys Pro Gly Pro Val Tyr Tyr Gln Asp Tyr Thr
50 55 60

Gly Pro Val Tyr His Arg Ala Pro Leu Glu Phe Phe Asp Glu Thr Gln
65 70 75 80

Phe Glu Glu Thr Thr Lys Arg Ile Gly Arg Val Thr Gly Ser Asp Gly
85 90 95

Lys Leu Tyr His Ile Tyr Val Glu Val Asp Gly Glu Ile Leu Leu Lys
100 105 110

eo1f-othd-000001

Gln Ala Lys Arg Gly Thr Pro Arg Thr Leu Lys Trp Thr Arg Asn Thr
115 120 125

Thr Asn Cys Pro Leu Trp Val Thr Ser Cys Asp Thr Ser Val Asp Lys
130 135 140

Leu Ala Ala Ala Leu Glu His His His His His His
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<210> 8
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<213> CSFV

<400> 8

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

Glu Asp Glu Val Glu Val Gly Ile Arg Asp Leu Pro Arg Lys Gly Asp
35 40 45

Cys Arg Thr Gly Asn Arg Leu Gly Pro Val Ser Gly Leu Phe Val Lys
50 55 60

Pro Gly Pro Val Phe Tyr Gln Asp Tyr Ser Gly Pro Val Tyr His Arg
65 70 75 80

Ala Pro Leu Glu Gln Phe Lys Gln Thr Pro Met Glu Glu Thr Thr Lys
85 90 95

Arg Ile Gly Arg Val Thr Gly Ser Asp Gly Asn Leu Tyr His Met Tyr
100 105 110

Val Glu Thr Asp Gly Glu Ile Leu Val Lys Gln Ala Lys Arg Glu Gly
115 120 125

Gln Asp Val Leu Lys Trp Thr Tyr Asn Thr Leu Asp Ser Pro Ile Trp
130 135 140

Val Thr Ser Cys Ser Val Met Ala Thr Lys Ala Val Cys Val Leu Lys
145 150 155 160

Gly Asp Gly Pro Val Gln Gly Ile Ile Asn Phe Glu Gln Lys Glu Ser
165 170 175

Asn Gly Pro Val Lys Val Trp Gly Ser Ile Lys Gly Leu Thr Glu Gly
180 185 190

Leu His Gly Phe His Val His Glu Phe Gly Asp Asn Thr Ala Gly Cys

195

200

205

Thr Ser Ala Gly Pro His Phe Asn Pro Leu Ser Arg Lys His Gly Gly
 210 215 220

Pro Lys Asp Glu Glu Arg His Val Gly Asp Leu Gly Asn Val Thr Ala
 225 230 235 240

Asp Lys Asp Gly Val Ala Asp Val Ser Ile Glu Asp Ser Val Ile Ser
 245 250 255

Leu Ser Gly Asp His Cys Ile Ile Gly Arg Thr Leu Val Val His Glu
 260 265 270

Lys Ala Asp Asp Leu Gly Lys Gly Gly Asn Glu Glu Ser Thr Lys Thr
 275 280 285

Gly Asn Ala Gly Ser Arg Leu Ala Cys Gly Val Ile Gly Thr Ala Gln
 290 295 300

Val Asp Asp Tyr Lys Asp Asp Asp Asp Lys Gly Gly Gly Gly Ser Gly
 305 310 315 320

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

Glu Asp Asp Ile Glu Thr Thr Leu Arg Asp Leu Pro Arg Lys Gly Asp
 35 40 45

Cys Arg Ser Gly Asn His Leu Gly Pro Val Ser Gly Ile Tyr Ile Lys
 50 55 60

Pro Gly Pro Val Tyr Tyr Gln Asp Tyr Thr Gly Pro Val Tyr His Arg
 65 70 75 80

Ala Pro Leu Glu Phe Phe Asp Glu Thr Gln Phe Glu Glu Thr Thr Lys
 85 90 95

Arg Ile Gly Arg Val Thr Gly Ser Asp Gly Lys Leu Tyr His Ile Tyr
 100 105 110

eo1f-othd-000001

Val Glu Val Asp Gly Glu Ile Leu Leu Lys Gln Ala Lys Arg Gly Thr
 115 120 125
 Pro Arg Thr Leu Lys Trp Thr Arg Asn Thr Thr Asn Cys Pro Leu Trp
 130 135 140
 Val Thr Ser Cys Asp Thr Met Ala Thr Lys Ala Val Cys Val Leu Lys
 145 150 155 160
 Gly Asp Gly Pro Val Gln Gly Ile Ile Asn Phe Glu Gln Lys Glu Ser
 165 170 175
 Asn Gly Pro Val Lys Val Trp Gly Ser Ile Lys Gly Leu Thr Glu Gly
 180 185 190
 Leu His Gly Phe His Val His Glu Phe Gly Asp Asn Thr Ala Gly Cys
 195 200 205
 Thr Ser Ala Gly Pro His Phe Asn Pro Leu Ser Arg Lys His Gly Gly
 210 215 220
 Pro Lys Asp Glu Glu Arg His Val Gly Asp Leu Gly Asn Val Thr Ala
 225 230 235 240
 Asp Lys Asp Gly Val Ala Asp Val Ser Ile Glu Asp Ser Val Ile Ser
 245 250 255
 Leu Ser Gly Asp His Cys Ile Ile Gly Arg Thr Leu Val Val His Glu
 260 265 270
 Lys Ala Asp Asp Leu Gly Lys Gly Gly Asn Glu Glu Ser Thr Lys Thr
 275 280 285
 Gly Asn Ala Gly Ser Arg Leu Ala Cys Gly Val Ile Gly Thr Ala Gln
 290 295 300
 Val Asp Asp Tyr Lys Asp Asp Asp Asp Lys Gly Gly Gly Gly Ser Gly
 305 310 315 320
 Gly Gly Gly Ser Trp Ser His Pro Gln Phe Glu Lys
 325 330

<210> 10
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 <213> CSFV

<400> 10

Gln Pro Asp Ala Ile Asn Ala Pro Val Thr Cys Cys Tyr Asn Phe Thr
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eo1f-othd-000001

Asn Arg Lys Ile Ser Val Gln Arg Leu Ala Ser Tyr Arg Arg Ile Thr
20 25 30

Ser Ser Lys Cys Pro Lys Glu Ala Val Ile Phe Lys Thr Ile Val Ala
35 40 45

Lys Glu Ile Cys Ala Asp Pro Lys Gln Lys Trp Val Gln Asp Ser Met
50 55 60

Asp His Leu Asp Lys Gln Thr Gln Thr Pro Lys Thr
65 70 75

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<400> 11

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

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<212> PRT
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<400> 12

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

Lys Val Trp Gly Ser Ile Lys Gly Leu Thr Glu Gly Leu His Gly Phe
35 40 45

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

Pro His Phe Asn Pro Leu Ser Arg Lys His Gly Gly Pro Lys Asp Glu
65 70 75 80

Glu Arg His Val Gly Asp Leu Gly Asn Val Thr Ala Asp Lys Asp Gly
85 90 95

Val Ala Asp Val Ser Ile Glu Asp Ser Val Ile Ser Leu Ser Gly Asp
100 105 110

His Cys Ile Ile Gly Arg Thr Leu Val Val His Glu Lys Ala Asp Asp
115 120 125

Leu Gly Lys Gly Gly Asn Glu Glu Ser Thr Lys Thr Gly Asn Ala Gly

eo1f-othd-000001

130

135

140

Ser Arg Leu Ala Cys Gly Val Ile Gly Thr Ala Gln Val Asp Asp Tyr
145 150 155 160

Lys Asp Asp Asp Asp Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
165 170 175

Trp Ser His Pro Gln Phe Glu Lys
180