

Act 220A_sequences.ST25.txt
SEQUENCE LISTING

<110> ACTELION PHARMACEUTICALS LTD
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<130> Act 220A
<160> 41
<170> PatentIn version 3.3
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<211> 1164
<212> DNA
<213> Homo sapiens

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<211> 387
<212> PRT
<213> Homo sapiens

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Act 220A_sequences.ST25.txt

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 65 70 75 80
 Phe Gln Ala Thr Ile Tyr Thr Leu Asp Gly Trp Val Phe Gly Ser Leu
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 Leu Cys Lys Ala Val His Phe Leu Ile Phe Leu Thr Met His Ala Ser
 100 105 110
 Ser Phe Thr Leu Ala Ala Val Ser Leu Asp Arg Tyr Leu Ala Ile Arg
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 Tyr Pro Leu His Ser Arg Glu Leu Arg Thr Pro Arg Asn Ala Leu Ala
 130 135 140
 Ala Ile Gly Leu Ile Trp Gly Leu Ser Leu Leu Phe Ser Gly Pro Tyr
 145 150 155 160
 Leu Ser Tyr Tyr Arg Gln Ser Gln Leu Ala Asn Leu Thr Val Cys His
 165 170 175
 Pro Ala Trp Ser Ala Pro Arg Arg Arg Ala Met Asp Ile Cys Thr Phe
 180 185 190
 Val Phe Ser Tyr Leu Leu Pro Val Leu Val Leu Gly Leu Thr Tyr Ala
 195 200 205
 Arg Thr Leu Arg Tyr Leu Trp Arg Ala Val Asp Pro Val Ala Ala Gly
 210 215 220
 Ser Gly Ala Arg Arg Ala Lys Arg Lys Val Thr Arg Met Ile Leu Ile
 225 230 235 240
 Val Ala Ala Leu Phe Cys Leu Cys Trp Met Pro His His Ala Leu Ile
 245 250 255
 Leu Cys Val Trp Phe Gly Gln Phe Pro Leu Thr Arg Ala Thr Tyr Ala
 260 265 270
 Leu Arg Ile Leu Ser His Leu Val Ser Tyr Ala Asn Ser Cys Val Asn
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Pro Ile Val Tyr Ala Leu Val Ser Lys His Phe Arg Lys Gly Phe Arg
290 295 300

Thr Ile Cys Ala Gly Leu Leu Gly Arg Ala Pro Gly Arg Ala Ser Gly
305 310 315 320

Arg Val Cys Ala Ala Ala Arg Gly Thr His Ser Gly Ser Val Leu Glu
325 330 335

Arg Glu Ser Ser Asp Leu Leu His Met Ser Glu Ala Ala Gly Ala Leu
340 345 350

Arg Pro Cys Pro Gly Ala Ser Gln Pro Cys Ile Leu Glu Pro Cys Pro
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Gly Pro Ser Trp Gln Gly Pro Lys Ala Gly Asp Ser Ile Leu Thr Val
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Asp Val Ala
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Act 220A_sequences.ST25.txt

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 35 40 45

Leu Leu Arg Gly Gly Gln Ala Val Ser Thr Thr Asn Leu Phe Ile Leu
 50 55 60

Asn Leu Gly Val Ala Asp Leu Cys Phe Ile Leu Cys Cys Val Pro Phe
 65 70 75 80

Gln Ala Thr Ile Tyr Thr Leu Asp Asp Trp Val Phe Gly Ser Leu Leu
 85 90 95

Cys Lys Ala Val His Phe Leu Ile Phe Leu Thr Met His Ala Ser Ser
 100 105 110

Phe Thr Leu Ala Ala Val Ser Leu Asp Arg Tyr Leu Ala Ile Arg Tyr
 115 120 125

Pro Leu His Ser Arg Glu Leu Arg Thr Pro Arg Asn Ala Leu Ala Ala
 130 135 140

Ile Gly Leu Ile Trp Gly Leu Ala Leu Leu Phe Ser Gly Pro Tyr Leu
 145 150 155 160

Ser Tyr Tyr Ser Gln Ser Gln Leu Ala Asn Leu Thr Val Cys His Pro
 165 170 175

Ala Trp Ser Ala Pro Arg Arg Arg Ala Met Asp Leu Cys Thr Phe Val
 180 185 190

Phe Ser Tyr Leu Leu Pro Val Leu Val Leu Ser Leu Thr Tyr Ala Arg
 195 200 205

Thr Leu His Tyr Leu Trp Arg Thr Val Asp Pro Val Ala Ala Gly Ser
 210 215 220

Act 220A_sequences.ST25.txt

Gly Ser Gln Arg Ala Lys Arg Lys Val Thr Arg Met Ile Val Ile Val
 225 230 235 240

Ala Val Leu Phe Cys Leu Cys Trp Met Pro His His Ala Leu Ile Leu
 245 250 255

Cys Val Trp Phe Gly Arg Phe Pro Leu Thr Arg Ala Thr Tyr Ala Leu
 260 265 270

Arg Ile Leu Ser His Leu Val Ser Tyr Ala Asn Ser Cys Val Asn Pro
 275 280 285

Ile Val Tyr Ala Leu Val Ser Lys His Phe Arg Lys Gly Phe Arg Lys
 290 295 300

Ile Cys Ala Gly Leu Leu Arg Arg Ala Pro Arg Arg Ala Ser Gly Arg
 305 310 315 320

Val Cys Ile Leu Ala Pro Gly Asn His Ser Gly Gly Met Leu Glu Pro
 325 330 335

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Pro Ala Cys
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Act 220A_sequences.ST25.txt

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 <211> 372
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 <213> rat

<400> 6

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 35 40 45

Val Leu Leu Arg Gly Gly Gln Ala Val Ser Thr Thr Asn Leu Phe Ile
 50 55 60

Leu Asn Leu Gly Val Ala Asp Leu Cys Phe Ile Leu Cys Cys Val Pro
 65 70 75 80

Phe Gln Ala Thr Ile Tyr Thr Leu Asp Asp Trp Val Phe Gly Ser Leu
 85 90 95

Leu Cys Lys Ala Val His Phe Leu Ile Phe Leu Thr Met His Ala Ser
 100 105 110

Ser Phe Thr Leu Ala Ala Val Ser Leu Asp Arg Tyr Leu Ala Ile Arg
 115 120 125

Tyr Pro Leu His Ser Arg Glu Leu Arg Thr Pro Arg Asn Ala Leu Ala
 130 135 140

Ala Ile Gly Leu Ile Trp Gly Leu Ala Leu Leu Phe Ser Gly Pro Tyr
 145 150 155 160

Leu Ser Tyr Tyr Arg Gln Ser Gln Leu Ala Asn Leu Thr Val Cys His
 165 170 175

Act 220A_sequences.ST25.txt

Pro Ala Trp Ser Ala Pro Arg Arg Arg Ala Met Asp Leu Cys Thr Phe
180 185 190

Val Phe Ser Tyr Leu Leu Pro Val Leu Val Leu Ser Leu Thr Tyr Ala
195 200 205

Arg Thr Leu Arg Tyr Leu Trp Arg Thr Val Asp Pro Val Thr Ala Gly
210 215 220

Ser Gly Ser Gln Arg Ala Lys Arg Lys Val Thr Arg Met Ile Ile Ile
225 230 235 240

Val Ala Val Leu Phe Cys Leu Cys Trp Met Pro His His Ala Leu Ile
245 250 255

Leu Cys Val Trp Phe Gly Arg Phe Pro Leu Thr Arg Ala Thr Tyr Ala
260 265 270

Leu Arg Ile Leu Ser His Leu Val Ser Tyr Ala Asn Ser Cys Val Asn
275 280 285

Pro Ile Val Tyr Ala Leu Val Ser Lys His Phe Arg Lys Gly Phe Arg
290 295 300

Lys Ile Cys Ala Gly Leu Leu Arg Pro Ala Pro Arg Arg Ala Ser Gly
305 310 315 320

Arg Val Ser Ile Leu Ala Pro Gly Asn His Ser Gly Ser Met Leu Glu
325 330 335

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Act 220A_sequences.ST25.txt

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Ala Leu Ile Phe Leu Val Gly Thr Val Gly Asn Thr Leu Val Leu Ala
35          40          45

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Val Leu Leu Arg Gly Gly Gln Ala Val Ser Thr Thr Asn Leu Phe Ile
50          55          60

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Leu Asn Leu Gly Val Ala Asp Leu Cys Phe Ile Leu Cys Cys Val Pro
65          70          75          80

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Phe Gln Ala Thr Ile Tyr Thr Leu Asp Gly Trp Val Phe Gly Ser Leu
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Leu Cys Lys Ala Val His Phe Leu Ile Phe Leu Thr Met His Ala Ser
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Act 220A_sequences.ST25.txt

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130 135 140

Ala Ile Ala Leu Ile Trp Gly Leu Ser Leu Leu Phe Ser Gly Pro Tyr
145 150 155 160

Leu Ser Tyr Tyr Arg Gln Ser Gln Leu Ala Asn Leu Thr Val Cys His
165 170 175

Pro Ala Trp Ser Ala Pro Arg Arg Arg Ala Met Asp Leu Cys Thr Phe
180 185 190

Val Phe Ser Tyr Leu Leu Pro Val Leu Val Leu Ser Leu Thr Tyr Ala
195 200 205

Arg Thr Leu Arg Tyr Leu Trp Arg Ala Val Asp Pro Val Ala Ala Gly
210 215 220

Ser Gly Ala Arg Arg Ala Lys Arg Lys Val Thr Arg Met Ile Leu Ile
225 230 235 240

Val Ala Ala Leu Phe Cys Leu Cys Trp Met Pro His His Ala Leu Ile
245 250 255

Leu Cys Val Trp Phe Gly His Phe Pro Leu Thr Arg Ala Thr Tyr Ala
260 265 270

Leu Arg Ile Leu Ser His Leu Val Ser Tyr Ala Asn Ser Cys Val Asn
275 280 285

Pro Ile Val Tyr Ala Leu Val Ser Lys His Phe Arg Lys Gly Phe Arg
290 295 300

Lys Ile Cys Ala Gly Leu Leu Gly Arg Ala Pro Arg Arg Ala Ser Gly
305 310 315 320

Arg Val Cys Ala Ala Ala Pro Gly Thr His Ser Gly Ser Val Leu Glu
325 330 335

Arg Glu Ser Thr Asp Leu Ser His Val Ser Glu Ala Ala Glu Ala Leu
340 345 350

His Pro Cys Pro Gly Ala Ser Gln Pro Cys Thr Leu Glu Pro Gly Pro
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Gly Pro Ser Trp Arg Gly Pro Lys Ala Gly Asn Ser Ile Leu Thr Val
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Asp Val Thr
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<212> DNA
<213> chimpanzee

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<213> chimpanzee

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Ala Leu Ile Phe Leu Val Gly Ile Val Gly Asn Thr Leu Val Leu Ala
35 40 45

Act 220A_sequences.ST25.txt

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

Act 220A_sequences.ST25.txt

Arg Val Cys Ala Ala Ala Arg Gly Thr His Ser Gly Ser Val Leu Glu
325 330 335

Arg Glu Ser Ser Asp Leu Leu His Met Ser Glu Ala Ala Gly Ala Leu
340 345 350

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Gly Pro Ser Trp Gln Gly Pro Lys Ala Gly Asp Ser Ile Leu Thr Val
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Asp Val Ala
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<212> DNA
<213> Homo sapiens

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Glu Arg Arg Asn Trp Thr Pro Gln Ala Met Leu Tyr Leu Lys Gly Ala
35 40 45

Gln Gly Arg Arg Phe Ile Ser Asp Gln Ser Arg Arg Lys Asp Leu Ser
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Leu Leu Asn
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Arg Phe Ile Ser Asp Gln Ser
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<400> 17

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Page 13

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Gln Thr Arg Phe Leu Glu Asp Ser Leu Leu Asn Trp
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