

SEQUENCE LISTING

<110> Eisai R&D Management Co., Ltd.

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<170> PatentIn version 3.1

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Gln Pro Ser Phe Gln Ala His His Arg Gly Thr Val Thr Ala Gly Ser
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195 200 205

Asn His Leu Pro Gln Asp Leu Ala Ala Ser Thr Phe Pro Pro Gln Leu
210 215 220

Thr Ala Thr Ser Pro Lys Thr Pro Gly Thr Met Thr Glu Gly Tyr Thr
225 230 235 240

Val Asp Asn Leu Ile Arg Val Gly Val Ala Ala Ala Ile Leu Leu Ile
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Lys Ala Gly Ser Val Leu Gly Pro Val Lys Phe Ala Leu Leu Lys Val	
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 85 90 95

Cys Glu Tyr Tyr Ser Lys Trp Pro His Asp Thr Pro Ser His Pro Ser
 100 105 110

Asn Ala Leu Phe Leu Leu Val Thr Gly Tyr Leu Pro Gln Pro Ser Phe
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Gly Pro Ser Asn Leu Leu Glu Ile Ser Val Ile Asp Asn His Leu Pro
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Gln Asp Leu Ala Ala Ser Thr Phe Pro Pro Gln Leu Thr Ala Thr Ser
 225 230 235 240

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

Tyr Arg Ala Ser Gly Pro Ser Asn Leu Leu Glu Ile Ser Val Ile Asp
 195 200 205

Asn His Leu Pro Gln Asp Leu Ala Ala Ser Thr Phe Pro Pro Gln Leu
 210 215 220

Thr Ala Thr Ser Pro Lys Thr Pro Gly Thr Met Thr Glu Gly Tyr Thr
 225 230 235 240

Val Asp Asn Leu Ile Arg Val Gly Val Ala Ala Ala Ile Leu Leu Ile
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 Lys Ala Gly Ser Val Leu Gly Pro Val Lys Phe Ala Leu Leu Lys Val
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 Cys Val Tyr Tyr Gln Ala Lys Ala Pro Tyr Arg Ala Ser Gly Pro Ser
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 aat ctc ctt gag atc tct gtg ata gat gca aga caa cca tct gcc tca 729
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Cys Lys Ser Pro Thr Pro Ser Lys Tyr Phe Ile Leu Lys Lys Glu Gly
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Asp Phe His Phe Thr Asp Leu Arg Gln Asn Asp Gly Gly His Tyr Thr
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Cys Glu Tyr Tyr Ser Lys Trp Pro His Asp Thr Pro Ser His Pro Ser
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Asn Ala Leu Phe Leu Leu Val Thr Gly Tyr Leu Pro Gln Pro Ser Phe
 115 120 125

Gln Ala His His Arg Gly Thr Val Thr Ala Gly Ser Lys Val Thr Leu
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Gln Cys Gln Lys Ala Gly Ser Val Leu Gly Pro Val Lys Phe Ala Leu
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Leu Lys Val Gly His Ser Thr Pro Val Gln Thr Arg Ser Ser Thr Gly
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Met Val Ser Asp Phe Ser Leu Gln Asn Val Thr Ala Arg Asp Ser Gly
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Glu Tyr Ser Cys Val Tyr Tyr Gln Ala Lys Ala Pro Tyr Arg Ala Ser
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Gly Pro Ser Asn Leu Leu Glu Ile Ser Val Ile Asp Ala Arg Gln Pro
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Asn Tyr Ser Cys Met Tyr Tyr Gln Thr Lys Ser Pro Phe Trp Ala Ser	
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Glu Pro Ser Asp Gln Leu Glu Ile Leu Val Thr Val Pro Pro Gly Thr	
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245 250 255	
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Cys Trp Thr Pro Ala Arg Gly Val Ser Phe Val Leu Arg Lys Gly Gly
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Ile Ile Leu Glu Ser Pro Lys Pro Leu Asp Ser Thr Glu Gly Ala Ala
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Glu Phe His Leu Asn Asn Leu Lys Val Arg Asn Ala Gly Glu Tyr Thr
 85 90 95

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

Arg Thr Tyr Gln Arg Gly Thr Val Thr Ala Gly Gly Arg Val Thr Leu
 130 135 140

Gln Cys Gln Lys Arg Asp Gln Leu Phe Val Pro Ile Met Phe Ala Leu
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Leu Lys Ala Gly Thr Pro Ser Pro Ile Gln Leu Gln Ser Pro Ala Gly
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Lys Glu Ile Asp Phe Ser Leu Val Asp Val Thr Ala Gly Asp Ala Gly

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185

190

Asn Tyr Ser Cys Met Tyr Tyr Gln Thr Lys Ser Pro Phe Trp Ala Ser
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Glu Pro Ser Asp Gln Leu Glu Ile Leu Val Thr Val Pro Pro Gly Thr
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ttc ttg ttg gtc aca ggg tac tta cct cag ccc tcc ttt caa gcc cac Phe Leu Leu Val Thr Gly Tyr Leu Pro Gln Pro Ser Phe Gln Ala His 120 125 130			441
cac cgg ggt aca gtg act gca gga agc aag gtg act ttg cag tgc cag His Arg Gly Thr Val Thr Ala Gly Ser Lys Val Thr Leu Gln Cys Gln 135 140 145			489
aaa gca ggc agt gtc ctc gga ccc gta aag ttt ggc tta ctg aag gtg Lys Ala Gly Ser Val Leu Gly Pro Val Lys Phe Ala Leu Leu Lys Val 150 155 160			537
gga cac tca act cct gtg cag aca agg agc tca aca gga atg gta tca Gly His Ser Thr Pro Val Gln Thr Arg Ser Ser Thr Gly Met Val Ser 165 170 175			585
gac ttc tct ctt cag aat gtg aca gcc aga gac tgc ggg gaa tac agc Asp Phe Ser Leu Gln Asn Val Thr Ala Arg Asp Ser Gly Glu Tyr Ser 180 185 190 195			633
tgt gtt tac tat cag gca aag gct ccc tat cgg gcc tca ggg ccc agc Cys Val Tyr Tyr Gln Ala Lys Ala Pro Tyr Arg Ala Ser Gly Pro Ser 200 205 210			681
aat ctc ctt gag atc tct gtg ata gac aac cat ctg cct caa gat ctt Asn Leu Leu Glu Ile Ser Val Ile Asp Asn His Leu Pro Gln Asp Leu 215 220 225			729
gct gcc tgc act ttc cca ccg caa ctg aca gca acc tca ccc aag acc Ala Ala Ser Thr Phe Pro Pro Gln Leu Thr Ala Thr Ser Pro Lys Thr			777

230	235	240	
ccg ggt aca atg aca gaa ggc tac act gtg gat aat ctc atc cgg gtc			825
Pro Gly Thr Met Thr Glu Gly Tyr Thr Val Asp Asn Leu Ile Arg Val			
245	250	255	
ggc gtg gct gct gca atc ctg cta ata gtg gga ggc ttc ctg gtt gaa			873
Gly Val Ala Ala Ala Ile Leu Leu Ile Val Gly Gly Phe Leu Val Glu			
260	265	270	275
gcc tgg cac agt gag cgg ctg tct cca aat aaa ccc tgg taa			915
Ala Trp His Ser Glu Arg Leu Ser Pro Asn Lys Pro Trp			
280	285		
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<400> 12

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Ala	Trp	Pro	Ser	Thr	Val	Leu	Pro	Thr	Lys	Ser	His	Val	Thr	Met	Gln
	35						40					45			

Cys	Lys	Ser	Pro	Thr	Pro	Ser	Lys	Tyr	Phe	Ile	Leu	Lys	Lys	Glu	Gly
	50					55					60				

Phe	Ala	Leu	Asn	Ser	Val	Lys	Pro	Tyr	Asn	Leu	Thr	Glu	Glu	Thr	Ala
65					70					75					80

Asp	Phe	His	Phe	Thr	Asp	Leu	Arg	Gln	Asn	Asp	Gly	Gly	His	Tyr	Thr
				85					90					95	

Cys Glu Tyr Tyr Ser Lys Trp Pro His Asp Thr Pro Ser His Pro Ser
 100 105 110

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

Gln Ala His His Arg Gly Thr Val Thr Ala Gly Ser Lys Val Thr Leu
 130 135 140

Gln Cys Gln Lys Ala Gly Ser Val Leu Gly Pro Val Lys Phe Ala Leu
 145 150 155 160

Leu Lys Val Gly His Ser Thr Pro Val Gln Thr Arg Ser Ser Thr Gly
 165 170 175

Met Val Ser Asp Phe Ser Leu Gln Asn Val Thr Ala Arg Asp Ser Gly
 180 185 190

Glu Tyr Ser Cys Val Tyr Tyr Gln Ala Lys Ala Pro Tyr Arg Ala Ser
 195 200 205

Gly Pro Ser Asn Leu Leu Glu Ile Ser Val Ile Asp Asn His Leu Pro
 210 215 220

Gln Asp Leu Ala Ala Ser Thr Phe Pro Pro Gln Leu Thr Ala Thr Ser
 225 230 235 240

Pro Lys Thr Pro Gly Thr Met Thr Glu Gly Tyr Thr Val Asp Asn Leu
 245 250 255

Ile Arg Val Gly Val Ala Ala Ala Ile Leu Leu Ile Val Gly Gly Phe
 260 265 270

Leu Val Glu Ala Trp His Ser Glu Arg Leu Ser Pro Asn Lys Pro Trp
 275 280 285

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 gtccgaggct atgtgggaga gaagatcaag ttgaaatgca ccttcaagtc atcttcagat 180
 gtcactgaca agctgacat agactggaca taccgacctc ccagcagcag ccgcacagag 240
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 ctaaaggaca atgggacgtt cagctgtgct gtgaagaacc ctccagacgt giaccacaat 420
 atccccctaa cagagctcac ggtcacagaa aggggggtcg gcaccatgct gtctttgtg 480
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 tccattgaag ttccgatga cactgaccag gaggacagca atgactgcat gacgaggctt 660
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<400> 14

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 1 5 10 15

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

Ile Lys Leu Lys Cys Thr Phe Lys Ser Ser Ser Asp Val Thr Asp Lys
 50 55 60

Leu Thr Ile Asp Trp Thr Tyr Arg Pro Pro Ser Ser Ser Arg Thr Glu
 65 70 75 80

Ser Ile Phe His Tyr Gln Ser Phe Gln Tyr Pro Thr Thr Ala Gly Thr
 85 90 95

Phe Arg Asp Arg Ile Ser Trp Ala Gly Asn Val Tyr Lys Gly Asp Ala
 100 105 110

Ser Ile Ser Ile Ser Asn Pro Thr Leu Lys Asp Asn Gly Thr Phe Ser
 115 120 125

Cys Ala Val Lys Asn Pro Pro Asp Val Tyr His Asn Ile Pro Leu Thr
 130 135 140

Glu Leu Thr Val Thr Glu Arg Gly Phe Gly Thr Met Leu Ser Ser Val
 145 150 155 160

Ala Leu Leu Ser Ile Leu Val Phe Val Pro Ser Ala Val Val Val Ile
 165 170 175

Leu Leu Leu Val Arg Met Gly Arg Lys Ala Thr Gly Val Gln Lys Arg
 180 185 190

Ser Arg Ser Gly Tyr Lys Lys Ser Ser Ile Glu Val Ser Asp Asp Thr
 195 200 205

Asp Gln Glu Asp Ser Asn Asp Cys Met Thr Arg Leu Cys Val Arg Cys
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Ala Glu Cys Leu Asp Ser Asp Tyr Glu Glu Glu Ala Tyr
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 cgaggttatg ttggagaaaa gatcaagttg aaatgcactt tcaagtcaac ttcagatgto 180
 actgacaago ttactataga ctggacatat cgcctccca gcagcagcca cacagtatca 240
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 aaggacaatg ggacattcag ctgtgctgtg aagaatccc cagatgtgca ccataatatt 420
 cccatgacag agctaacagt cacagaaagg ggttttgga ccatgcttcc ctctgtggcc 480
 ottttttcca tccttgtctt tgtgcctca gcctgggtgg ttgctctgct gctggtgaga 540
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 <212> PRT
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<400> 16

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Glu Ile Arg Ala Asp Ala His Val Arg Gly Tyr Val Gly Glu Lys Ile
 35 40 45

Lys Leu Lys Cys Thr Phe Lys Ser Thr Ser Asp Val Thr Asp Lys Leu
 50 55 60

Thr Ile Asp Trp Thr Tyr Arg Pro Pro Ser Ser Ser His Thr Val Ser
 65 70 75 80

Ile Phe His Tyr Gln Ser Phe Gln Tyr Pro Thr Thr Ala Gly Thr Phe
 85 90 95

Arg Asp Arg Ile Ser Trp Val Gly Asn Val Tyr Lys Gly Asp Ala Ser
 100 105 110

Ile Ser Ile Ser Asn Pro Thr Ile Lys Asp Asn Gly Thr Phe Ser Cys
 115 120 125

Ala Val Lys Asn Pro Pro Asp Val His His Asn Ile Pro Met Thr Glu
 130 135 140

Leu Thr Val Thr Glu Arg Gly Phe Gly Thr Met Leu Ser Ser Val Ala
 145 150 155 160

Leu Leu Ser Ile Leu Val Phe Val Pro Ser Ala Val Val Val Ala Leu
 165 170 175

Leu Leu Val Arg Met Gly Arg Lys Ala Ala Gly Leu Lys Lys Arg Ser
 180 185 190

Arg Ser Gly Tyr Lys Lys Ser Ser Ile Glu Val Ser Asp Asp Thr Asp
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Gln Glu Glu Glu Glu Ala Cys Met Ala Arg Leu Cys Val Arg Cys Ala
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24

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