

X20104PCTSequenceListingST25
SEQUENCE LISTING

<110> Eli Lilly and Company

<120> COMPOUNDS TO FIBROBLAST GROWTH FACTOR RECEPTOR-3 (FGFR3) AND METHODS OF TREATMENT

<130> X20104

<150> 61/917457
<151> 2013-12-18

<150> 61/928025
<151> 2014-01-16

<160> 13

<170> PatentIn version 3.5

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Trp Val Ser Thr Tyr Asn Gly Asp Thr Asn Tyr Ala Gln Lys Phe Gln
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Gly

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Val Leu Gly Tyr Tyr Asp Ser Ile Asp Gly Tyr Tyr Tyr Gly Met Asp
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Val

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Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Met Phe Thr Ser Tyr
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Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

Gly Trp Val Ser Thr Tyr Asn Gly Asp Thr Asn Tyr Ala Gln Lys Phe
 50 55 60

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Gln Gly Arg Val Thr Val Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

His Trp Tyr Arg Gln Lys Pro Gly Gln Ala Pro Val Leu Val Met Tyr
35 40 45

Leu Asp Thr Glu Arg Pro Ser Gly Ile Pro Glu Arg Met Ser Gly Ser
50 55 60

Asn Phe Gly Asn Thr Ala Thr Leu Thr Ile Thr Arg Val Glu Ala Gly
65 70 75 80

Asp Glu Ala Asp Tyr Tyr Cys Gln Val Trp Asp Ser Gly Ser Asp His
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Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly
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Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Met Phe Thr Ser Tyr
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 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45
 Gly Trp Val Ser Thr Tyr Asn Gly Asp Thr Asn Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Val Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Arg Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Val Leu Gly Tyr Tyr Asp Ser Ile Asp Gly Tyr Tyr Tyr Gly
 100 105 110
 Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Ala Ser
 115 120 125
 Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr
 130 135 140
 Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro
 145 150 155 160
 Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val
 165 170 175
 His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser
 180 185 190
 Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile
 195 200 205
 Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Arg Val
 210 215 220
 Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
 225 230 235 240
 Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
 245 250 255
 Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
 260 265 270
 Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
 275 280 285

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Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
290 295 300

Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
305 310 315 320

Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
325 330 335

Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
340 345 350

Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr
355 360 365

Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
370 375 380

Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
385 390 395 400

Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
405 410 415

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

His Trp Tyr Arg Gln Lys Pro Gly Gln Ala Pro Val Leu Val Met Tyr
35 40 45

Leu Asp Thr Glu Arg Pro Ser Gly Ile Pro Glu Arg Met Ser Gly Ser
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50

55

60

Asn Phe Gly Asn Thr Ala Thr Leu Thr Ile Thr Arg Val Glu Ala Gly
65 70 75 80

Asp Glu Ala Asp Tyr Tyr Cys Gln Val Trp Asp Ser Gly Ser Asp His
85 90 95

Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln Pro Lys
100 105 110

Ala Ala Pro Ser Val Thr Leu Phe Pro Pro Ser Ser Glu Glu Leu Gln
115 120 125

Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr Pro Gly
130 135 140

Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys Ala Gly
145 150 155 160

Val Glu Thr Thr Thr Pro Ser Lys Gln Ser Asn Asn Lys Tyr Ala Ala
165 170 175

Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His Arg Ser
180 185 190

Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys Thr Val
195 200 205

Ala Pro Ala Glu Cys Ser
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Met Gly Ala Pro Ala Cys Ala Leu Ala Leu Cys Val Ala Val Ala Ile
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Val Ala Gly Ala Ser Ser Glu Ser Leu Gly Thr Glu Gln Arg Val Val
20 25 30

Gly Arg Ala Ala Glu Val Pro Gly Pro Glu Pro Gly Gln Glu Leu Val
35 40 45

Phe Gly Ser Gly Asp Ala Val Glu Leu Ser Cys Pro Pro Pro Gly Gly
50 55 60

Gly Pro Met Gly Pro Thr Val Trp Val Lys Asp Gly Thr Gly Leu Val
65 70 75 80

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Pro Ser Glu Arg Val₈₅ Leu Val Gly Pro Gln₉₀ Arg Leu Val Leu Asn₉₅ Ala

Ser His Glu Asp₁₀₀ Ser Gly Ala Tyr Ser₁₀₅ Cys Arg Gln Arg Leu₁₁₀ Thr Arg

Val Leu Cys₁₁₅ His Phe Ser Val Arg₁₂₀ Val Thr Asp Ala Pro₁₂₅ Ser Ser Gly

Asp Asp₁₃₀ Glu Asp Gly Glu Asp₁₃₅ Glu Ala Glu Asp Thr₁₄₀ Gly Val Asp Thr

Gly₁₄₅ Ala Pro Tyr Trp Thr₁₅₀ Arg Pro Glu Arg Met₁₅₅ Asp Lys Lys Leu₁₆₀ Leu

Ala Val Pro Ala Ala₁₆₅ Asn Thr Val Arg Phe₁₇₀ Arg Cys Pro Ala Ala₁₇₅ Gly

Asn Pro Thr Pro₁₈₀ Ser Ile Ser Trp Leu₁₈₅ Lys Asn Gly Arg Glu₁₉₀ Phe Arg

Gly Glu His₁₉₅ Arg Ile Gly Gly Ile₂₀₀ Lys Leu Arg His Gln₂₀₅ Gln Trp Ser

Leu Val₂₁₀ Met Glu Ser Val Val₂₁₅ Pro Ser Asp Arg Gly₂₂₀ Asn Tyr Thr Cys

Val₂₂₅ Val Glu Asn Lys Phe₂₃₀ Gly Ser Ile Arg Gln₂₃₅ Thr Tyr Thr Leu₂₄₀ Asp

Val Leu Glu Arg Ser₂₄₅ Pro His Arg Pro Ile₂₅₀ Leu Gln Ala Gly Leu₂₅₅ Pro

Ala Asn Gln Thr₂₆₀ Ala Val Leu Gly Ser₂₆₅ Asp Val Glu Phe His₂₇₀ Cys Lys

Val Tyr Ser₂₇₅ Asp Ala Pro His Ile₂₈₀ Gln Trp Leu Lys His₂₈₅ Val Glu Val

Asn Gly₂₉₀ Ser Lys Val Gly Pro₂₉₅ Asp Gly Thr Pro Tyr₃₀₀ Val Thr Val Leu

Lys₃₀₅ Thr Ala Gly Ala Asn₃₁₀ Thr Thr Asp Lys Glu₃₁₅ Leu Glu Val Leu₃₂₀ Ser

Leu His Asn Val Thr₃₂₅ Phe Glu Asp Ala Gly₃₃₀ Glu Tyr Thr Cys Leu₃₃₅ Ala

Gly Asn Ser Ile₃₄₀ Gly Phe Ser His His₃₄₅ Ser Ala Trp Leu Val₃₅₀ Val Leu

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Pro Ala Glu Glu Glu Leu Val Glu Ala Asp Glu Ala Gly Ser Val Tyr
355 360 365

Ala Gly Ile Leu Ser Tyr Gly Val Gly Phe Phe Leu Phe Ile Leu Val
370 375 380

Val Ala Ala Val Thr Leu Cys Arg Leu Arg Ser Pro Pro Lys Lys Gly
385 390 395 400

Leu Gly Ser Pro Thr Val His Lys Ile Ser Arg Phe Pro Leu Lys Arg
405 410 415

Gln Val Ser Leu Glu Ser Asn Ala Ser Asn Ser Ser Asn Thr Pro Leu
420 425 430

Val Arg Ile Ala Arg Leu Ser Ser Gly Glu Gly Pro Thr Leu Ala Asn
435 440 445

Val Ser Glu Leu Glu Leu Pro Ala Asp Pro Lys Trp Glu Leu Ser Arg
450 455 460

Ala Arg Leu Thr Leu Gly Lys Pro Leu Gly Glu Gly Cys Phe Gly Gln
465 470 475 480

Val Val Met Ala Glu Ala Ile Gly Ile Asp Lys Asp Arg Ala Ala Lys
485 490 495

Pro Val Thr Val Ala Val Lys Met Leu Lys Asp Asp Ala Thr Asp Lys
500 505 510

Asp Leu Ser Asp Leu Val Ser Glu Met Glu Met Met Lys Met Ile Gly
515 520 525

Lys His Lys Asn Ile Ile Asn Leu Leu Gly Ala Cys Thr Gln Gly Gly
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Pro Leu Tyr Val Leu Val Glu Tyr Ala Ala Lys Gly Asn Leu Arg Glu
545 550 555 560

Phe Leu Arg Ala Arg Arg Pro Pro Gly Leu Asp Tyr Ser Phe Asp Thr
565 570 575

Cys Lys Pro Pro Glu Glu Gln Leu Thr Phe Lys Asp Leu Val Ser Cys
580 585 590

Ala Tyr Gln Val Ala Arg Gly Met Glu Tyr Leu Ala Ser Lys Cys Ile
595 600 605

His Arg Asp Leu Ala Ala Arg Asn Val Leu Val Thr Glu Asp Asn Val
610 615 620

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Met Lys Ile Ala Asp Phe Gly Leu Ala Arg Asp Val His Asn Leu Asp
625 630 635 640

Tyr Tyr Lys Lys Thr Thr Asn Gly Arg Leu Pro Val Lys Trp Met Ala
645 650 655

Pro Glu Ala Leu Phe Asp Arg Val Tyr Thr His Ser Asp Val Ser Phe
660 665 670

Gly Val Leu Leu Trp Glu Ile Phe Thr Leu Gly Gly Ser Pro Tyr Pro
675 680 685

Gly Ile Pro Val Glu Glu Leu Phe Lys Leu Leu Lys Glu Gly His Arg
690 695 700

Met Asp Lys Pro Ala Asn Cys Thr His Asp Leu Tyr Met Ile Met Arg
705 710 715 720

Glu Cys Trp His Ala Ala Pro Ser Arg Pro Thr Phe Lys Leu Val Glu
725 730 735

Asp Leu Asp Arg Val Leu Thr Val Thr Ser Thr Asp Glu Tyr Leu Asp
740 745 750

Leu Ser Ala Pro Phe Glu Tyr Ser Pro Gly Gly Gln Asp Thr Pro Ser
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