

ULPI_020_02W0_SeqList_ST25 (1)
SEQUENCE LISTING

<110> ULTRAGENYX PHARMACEUTICAL INC.

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<120> SIALYLATED GLYCOPROTEIN COMPOSITIONS AND USES THEREOF

<130> ULPI-020/02W0

<150> US 62/114,313

<151> 2015-02-10

<150> US 61/948,421

<151> 2014-03-05

<160> 1

<170> PatentIn version 3.5

<210> 1

<211> 629

<212> PRT

<213> Artificial Sequence

<220>

<223> recombinant human beta-glucuronidase

<400> 1

Leu Gln Gly Gly Met Leu Tyr Pro Gln Glu Ser Pro Ser Arg Glu Cys
1 5 10 15

Lys Glu Leu Asp Gly Leu Trp Ser Phe Arg Ala Asp Phe Ser Asp Asn
20 25 30

Arg Arg Arg Gly Phe Glu Glu Gln Trp Tyr Arg Arg Pro Leu Trp Glu
35 40 45

Ser Gly Pro Thr Val Asp Met Pro Val Pro Ser Ser Phe Asn Asp Ile
50 55 60

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Ser Gln Asp Trp Arg Leu Arg His Phe Val Gly Trp Val Trp Tyr Glu
65 70 75 80

Arg Glu Val Ile Leu Pro Glu Arg Trp Thr Gln Asp Leu Arg Thr Arg
85 90 95

Val Val Leu Arg Ile Gly Ser Ala His Ser Tyr Ala Ile Val Trp Val
100 105 110

Asn Gly Val Asp Thr Leu Glu His Glu Gly Gly Tyr Leu Pro Phe Glu
115 120 125

Ala Asp Ile Ser Asn Leu Val Gln Val Gly Pro Leu Pro Ser Arg Leu
130 135 140

Arg Ile Thr Ile Ala Ile Asn Asn Thr Leu Thr Pro Thr Thr Leu Pro
145 150 155 160

Pro Gly Thr Ile Gln Tyr Leu Thr Asp Thr Ser Lys Tyr Pro Lys Gly
165 170 175

Tyr Phe Val Gln Asn Thr Tyr Phe Asp Phe Phe Asn Tyr Ala Gly Leu
180 185 190

Gln Arg Ser Val Leu Leu Tyr Thr Thr Pro Thr Thr Tyr Ile Asp Asp
195 200 205

Ile Thr Val Thr Thr Ser Val Glu Gln Asp Ser Gly Leu Val Asn Tyr
210 215 220

Gln Ile Ser Val Lys Gly Ser Asn Leu Phe Lys Leu Glu Val Arg Leu
225 230 235 240

Leu Asp Ala Glu Asn Lys Val Val Ala Asn Gly Thr Gly Thr Gln Gly
245 250 255

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Gln Leu Lys Val Pro Gly Val Ser Leu Trp Trp Pro Tyr Leu Met His
260 265 270

Glu Arg Pro Ala Tyr Leu Tyr Ser Leu Glu Val Gln Leu Thr Ala Gln
275 280 285

Thr Ser Leu Gly Pro Val Ser Asp Phe Tyr Thr Leu Pro Val Gly Ile
290 295 300

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

Phe Tyr Phe His Gly Val Asn Lys His Glu Asp Ala Asp Ile Arg Gly
325 330 335

Lys Gly Phe Asp Trp Pro Leu Leu Val Lys Asp Phe Asn Leu Leu Arg
340 345 350

Trp Leu Gly Ala Asn Ala Phe Arg Thr Ser His Tyr Pro Tyr Ala Glu
355 360 365

Glu Val Met Gln Met Cys Asp Arg Tyr Gly Ile Val Val Ile Asp Glu
370 375 380

Cys Pro Gly Val Gly Leu Ala Leu Pro Gln Phe Phe Asn Asn Val Ser
385 390 395 400

Leu His His His Met Gln Val Met Glu Glu Val Val Arg Arg Asp Lys
405 410 415

Asn His Pro Ala Val Val Met Trp Ser Val Ala Asn Glu Pro Ala Ser
420 425 430

His Leu Glu Ser Ala Gly Tyr Tyr Leu Lys Met Val Ile Ala His Thr
435 440 445

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Lys Ser Leu Asp Pro Ser Arg Pro Val Thr Phe Val Ser Asn Ser Asn
450 455 460

Tyr Ala Ala Asp Lys Gly Ala Pro Tyr Val Asp Val Ile Cys Leu Asn
465 470 475 480

Ser Tyr Tyr Ser Trp Tyr His Asp Tyr Gly His Leu Glu Leu Ile Gln
485 490 495

Leu Gln Leu Ala Thr Gln Phe Glu Asn Trp Tyr Lys Lys Tyr Gln Lys
500 505 510

Pro Ile Ile Gln Ser Glu Tyr Gly Ala Glu Thr Ile Ala Gly Phe His
515 520 525

Gln Asp Pro Pro Leu Met Phe Thr Glu Glu Tyr Gln Lys Ser Leu Leu
530 535 540

Glu Gln Tyr His Leu Gly Leu Asp Gln Lys Arg Arg Lys Tyr Val Val
545 550 555 560

Gly Glu Leu Ile Trp Asn Phe Ala Asp Phe Met Thr Glu Gln Ser Pro
565 570 575

Thr Arg Val Leu Gly Asn Lys Lys Gly Ile Phe Thr Arg Gln Arg Gln
580 585 590

Pro Lys Ser Ala Ala Phe Leu Leu Arg Glu Arg Tyr Trp Lys Ile Ala
595 600 605

Asn Glu Thr Arg Tyr Pro His Ser Val Ala Lys Ser Gln Cys Leu Glu
610 615 620

Asn Ser Leu Phe Thr
625

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