

Rh74 VP1 Amino Acid Sequence (SEQ ID NO:1)

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Figure 1

Rh74 VP2 Amino Acid (SEQ ID NO:2):

TAPGKKRPVEPSPQRSPDSSTGIGKKGQPAKKRLNFGQTGDSESVDPDPQPIGEPPAGPSGLGSGTMAA
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Rh74 VP3 Amino Acid (SEQ ID NO:3):

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4-1 variant VP1 capsid amino acid sequence (SEQ ID NO:4)

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 121 AKKRVLLEPLGLVESPVKTAPGKKRPVEPSPQRSPDSSTGIGKKGQQPAKKRLNFGQTGDS
 181 ESVPDPQPIGEPPAAPSGVGPNTMAAGGGAPMADNNEGADGVGSSSGNWHCDSTWLGDRV
 241 ITTSTRTWALPTYNNHLYKQISNGTSGGSTNDNTYFGYSTPWGYFDFNRFHCHFSRPDWQ
 301 RLINNNWGFRPKRLNFKLFNIQVKEVTQNEGTKTIANNLTSTIQVFTDSEYQLPYVLGSA
 361 HQGCLPPFPADVFMIPQYGYLTLNNGSQAV GRSSFYCLEYFPSQMLRTGNNFEFSYNFED
 421 VPFHSSY AHSQSLDRLMNPLIDQYLYYLSRTQSTGGTAGTQQLLFSQAGPNNMSAQAKNW
 481 LPGPCYRQQRVSTTLSQNNNSNFAWTGATKYHLNGRDSL VNPGVAMATHKDDEERFFPSS
 541 GVLMFGKQGAGKDNVDYSSVMLTSEEEIKTTNPVATEQYGVVADNLQQQNAAPIVGAVNS
 601 QGALPGMVWQNRDVYLQGPWAKIPHTDGNFHPSPLMGGFGLKHPPPQILIKNTVPADP
 661 PTFNQAKLASFITQYSTGQVSVEIEWELQKENS KRWNPEIQYTSNYYKSTNVDFAVNTE
 721 GTYSEPRPIGTRYLTRNL

4-1 variant VP2 capsid amino acid sequence (SEQ ID NO:27)

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 GTRYLTRNL

4-1 variant VP3 capsid amino acid sequence (SEQ ID NO:3)

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 SQAGPNNMSAQAKNWLPGPCYRQQRVSTTLSQNNNSNFAWTGATKYHLNGRDSL VNPGVAMAT
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 TTFNQAKLASFITQYSTGQVSVEIEWELQKENS KRWNPEIQYTSNYYKSTNVDFAVNTEGTYSEPRPI
 GTRYLTRNL

15-1 variant VP1 capsid amino acid sequence (SEQ ID NO:5)

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61 KGEPVNAADAAALEHDRAVDQQLQAGDNPYLRYNHADADEFQERLQEDTSFGGNLGRAVFQ
121 AKKRVLEPLGLVESPVRTAPGKKRPVEPSPQRSPDSSTGIGKKGQQPARKRLNFGQTGDS
181 ESVPDPQPIGEPPAAPSGVGPNTMAAGGGAPMADNNEGADGVGSSSGNWHCDSTWLGDRV
241 ITTSTRTWALPTYNNHLYRQISNGTSGGSTNDNTYFGYSTPWGYFDFNRFHCHFSPRDWQ
301 RLINNNWGFRPKRLNFKLFNIQVKEVTQNEGTRTIANNLTSTIQVFTDSEYQLPYVLGSA
361 HQGCLPPFPADVFMIPQYG YLTLNNGSQAVGRSSFYCLEYFPSQMLRTGNNFEFSYNFED
421 VPFHSSY AHSQSLDRLMNPLIDQYL YYLSRTQSTGGTAGTQQLLFSQAGPNNMSAQAKNW
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601 QGALPGMVWQNRDVYLQGPWAKIPHTDGNFHPSPLMGGFGLKHPPPQILIKNTPVPADP
661 PTTFNQAKLASFITQYSTGQVSVEIEWELQKENS KRWNPEIQYTSNYYKSTNVDFAVNTE
721 GTYSEPRPIGTRYLTRNL

Figure 5

15-2 variant VP1 capsid amino acid sequence (SEQ ID NO:6)

1 MAADGYLPDWLEDNLSEGIREWDLKPGAPKPKANQQRQD NGRGLVLPGY RYLGPFNGLD
61 KGEPVNAADAAALEHDRAVDQQLQAGDNPYLRYNHADAEF QERLQEDTSF GGNLGRAVFQ
121 AKKRVLEPLGLVESPVRTAPGKKRPVEPSPQRSPTSSTGI GKRGQQPARK RLNFGQTGDS
181 ESVPDPQPIGEPPAAPSGVGPNTMAAGGGAPMADNNEGAD GVGSSSGNWH CDSTWLGDRV
241 ITTSTRTWALPTYNNHLYRQISNGTSGGSTNDNTYFGYST PWGYFDFNRF HCHFSPRDWQ
301 RLINNNWGFRPKRLNFKLFNIQVKEVTQNEGTRTIANNLT STIQVFTDSE YQLPYVLGSA
361 HQGCLPPFPADVFMIPQYGYLTLNNGSQAVGRSSFYCLEY FPSQMLRTGN NFEFSYNFED
421 VPFHSSY AHSQSLDRLMNPLIDQYLYYLSRTQSTGGTAGT QQLLFSQAGP NNMSAQAKNW
481 LPGPCYRQQRVSTTLSQNNNSNFAWTGATKYHLNGRDSL V NPGVAMATHR DDEERFFPSS
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601 QGALPGMVWQNRDVYLQGPWAKIPHTDGNFHPSPMLGGF GLKHPPPQIL IKNTPVPADP
661 PTTFNQAKLASFITQYSTGQVSVEIEWELQKENS KRWNPE IQYTSNYYKS TNVDFAVNTE
721 GTYSEPRPIGTRYLTRNL

Figure 6

15-3/15-5 variant VP1 capsid amino acid sequence (SEQ ID NO:7)

1 MAADGYLPDWLEDNLSEGIR EWWDLKPGAPKPKANQQRQD NGRGLVLPGY RYLGPFNGLD
61 KGEPVNAADAAALEHDRAVDQQLQAGDNPYLRYNHADAEF QERLQEDTSF GGNLGRAVFQ
121 AKKRVLEPLGLVESPVRTAPGKKRPVEPSPQRSPTSSTGI GKRGQQPAKK RLNFGQTGDS
181 ESVPDPQPIGEPPAAPSGVGPNTMAAGGGAPMADNNEGAD GVGSSSGNWH CDSTWLGDRV
241 ITTSTRTWALPTYNNHLYRQISNGTSGGSTNDNTYFGYST PWGYFDFNRF HCHFSPRDWQ
301 RLINNNWGFRPKRLNFKLFNIQVKEVTQNEGTRTIANNLT STIQVFTDSE YQLPYVLGSA
361 HQGCLPPFPADVFMIPQYGYLTLNNGSQAVGRSSFYCLEY FPSQMLRTGN NFEFSYNFED
421 VPFHSSY AHSQSLDRLMNPLIDQYLYYLSRTQSTGGTAGT QQLLFSQAGP NNMSAQAKNW
481 LPGPCYRQQRVSTTLSQNNNSNFAWTGATKYHLNGRDSL V NPGVAMATHR DDEERFFPSS
541 GVLMFGRQGAGRDNDYSSVMLTSEEEIRTTNPVATEQYG VVADNLQQQN AAPIVGAVNS
601 QGALPGMVWQNRDVYLQGPWAKIPHTDGNFHPSPLMGGF GLKHPPPQIL IKNTPVPADP
661 PTTFNQAKLASFITQYSTGQVSVEIEWELQKENSkrwnpe IQYTSNYYKS TNVDFAVNTE
721 GTYSEPRPIGTRYLTRNL

Figure 7

15-4 variant VP1 capsid amino acid sequence (SEQ ID NO:8)

1 MAADGYLPDWLEDNLSEGIREWWDLKPGAP KPKANQQRQD NGRGLVLPGY RYLGPFNGLD
61 KGEPVNAADAAALEHDRAYDQQLQAGDNPY LRYNHADA EF QERLQEDTSF GGNLGRAVFQ
121 AKKRVLEPLGLVESPVRTAPGKKRPVEPSP QRSPDSSTGI GKRGQQPAKK RLNFGQTGDS
181 ESVPDPQPIGEPPAAPSGVGPNTMAAGGGA PMADNNEGAD GVGSSSGNWH CDSTWLGDRV
241 ITTSTRTWALPTYNNHLYRQISNGTSGGST NDNTYFGYST PWGYFDFNRF HCHFSPRDWQ
301 RLINNNWGFRPKRLNFKLFNIQVKEVTQNE GTRTIANNLT STIQVFTDSE YQLPYVLGSA
361 HQGCLPPFPADVFMIPQYGYLTLNNGSQAV GRSSFYCLEY FPSQMLRTGN NFEFSYNFED
421 VPFHSSY AHSQSLDRLMNPLIDQYLYYLSR TQSTGGTAGT QQLLFSQAGP NNMSAQAKNW
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601 QGALPGMVWQNRDVYLQGPWAKIPHTDGN FHPSPLMGGF GLKHPPPQIL IKNTPVPADP
661 PTTFNQARLASFITQYSTGQVSVEIEWELQ KENSKRWNPE IQYTSNYYKS TNVDFAVNTE
721 GTYSEPRPIGTRYLTRNL

Figure 8

15-6 variant VP1 capsid amino acid sequence (SEQ ID NO:9)

1 MAADGYLPDWLEDNLSEGIREWWDLKPGAPKPKANQQRQDNGRGLVLPGY RYLGPFNGLD
61 KGEPVNAADAAALEHDRAVDQQLQAGDNPYLRYNHADADEFQERLQEDTSF GGNLGRAVFQ
121 AKKRVLEPLGLVESPVRTAPGKKRPVEPSPQRSPDSSTGIGKKGQQPAKK RLNFGQTGDS
181 ESVPDPQPIGEPPAAPSGVGPNTMAAGGGAPMADNNEGADGVGSSSGNWH CDSTWLGDRV
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301 RLINNNWGFRPKRLNFKLFNIQVKEVTQNEGTRTIANNLTSTIQVFTDSE YQLPYVLGSA
361 HQGCLPPFPADVFMIPQYGYLTLNNGSQAVGRSSFYCLEYFPSQMLRTGN NFEFSYNFED
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601 QGALPGMVWQNRDVYLQGPIWAKIPHTDGNFHPSPLMGGFGLKHPPPQIL IKNTPVPADP
661 PTTFNQARLASFITQYSTGQVSVEIEWELQKENS KRWNPEIQYTSNYYKS TNVDFAVNTE
721 GTYSEPRPIGTRYLTRNL

Figure 9

FIX39 nucleic acid sequence (SEQ ID NO:10)

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Figure 10

FIX19 nucleic acid sequence (SEQ ID NO:11)

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Figure 12A

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Figure 12A cont.

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Figure 12A cont.

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Figure 12B

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Figure 12B cont.

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6001 agtaactcaa gcagacacct tattttcttt tcaagcagaa aagactatga gatgggtggtt
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Figure 12B cont.

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Figure 12B cont.

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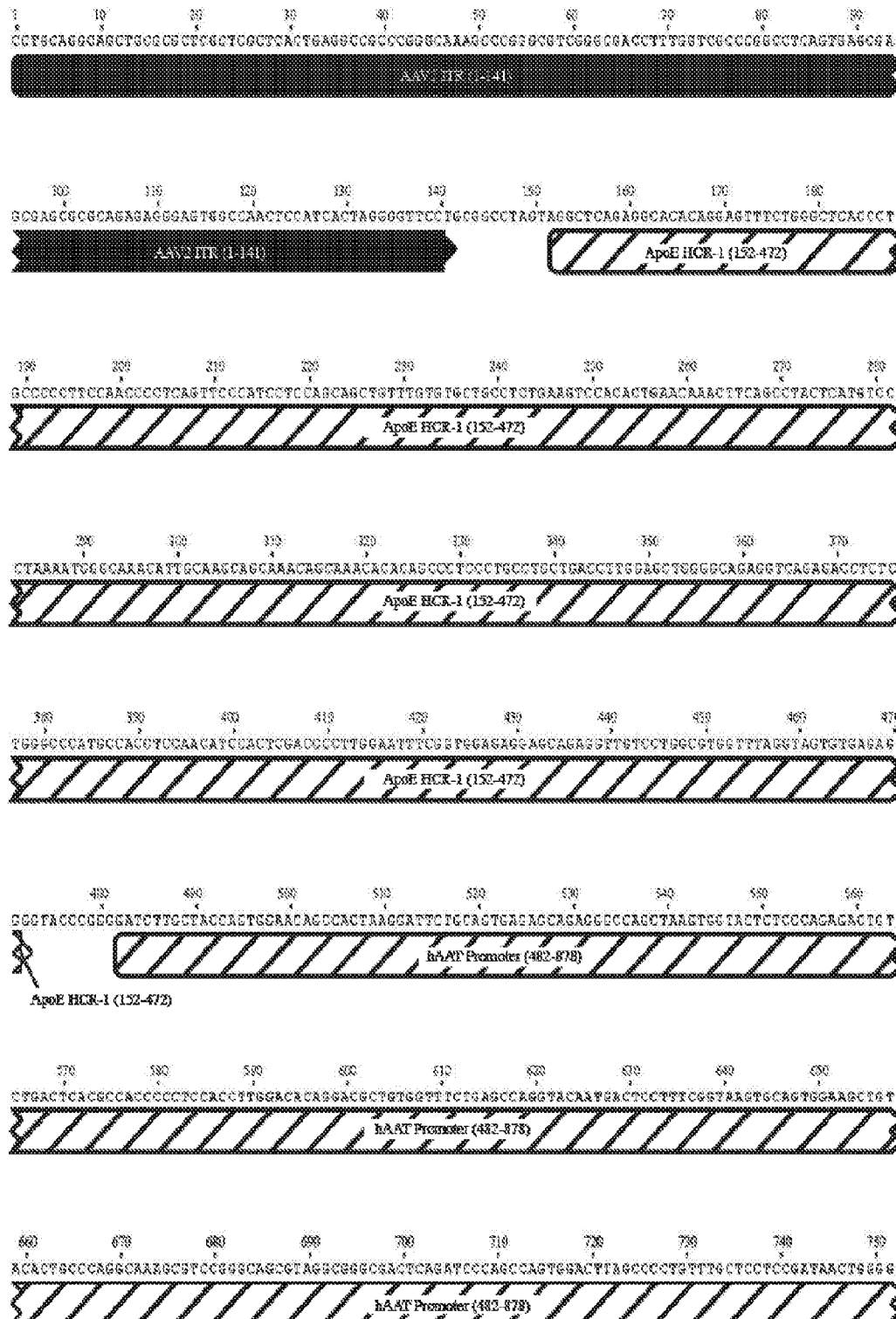


Figure 13

pAAV-ApoE_hAAT-FIX3

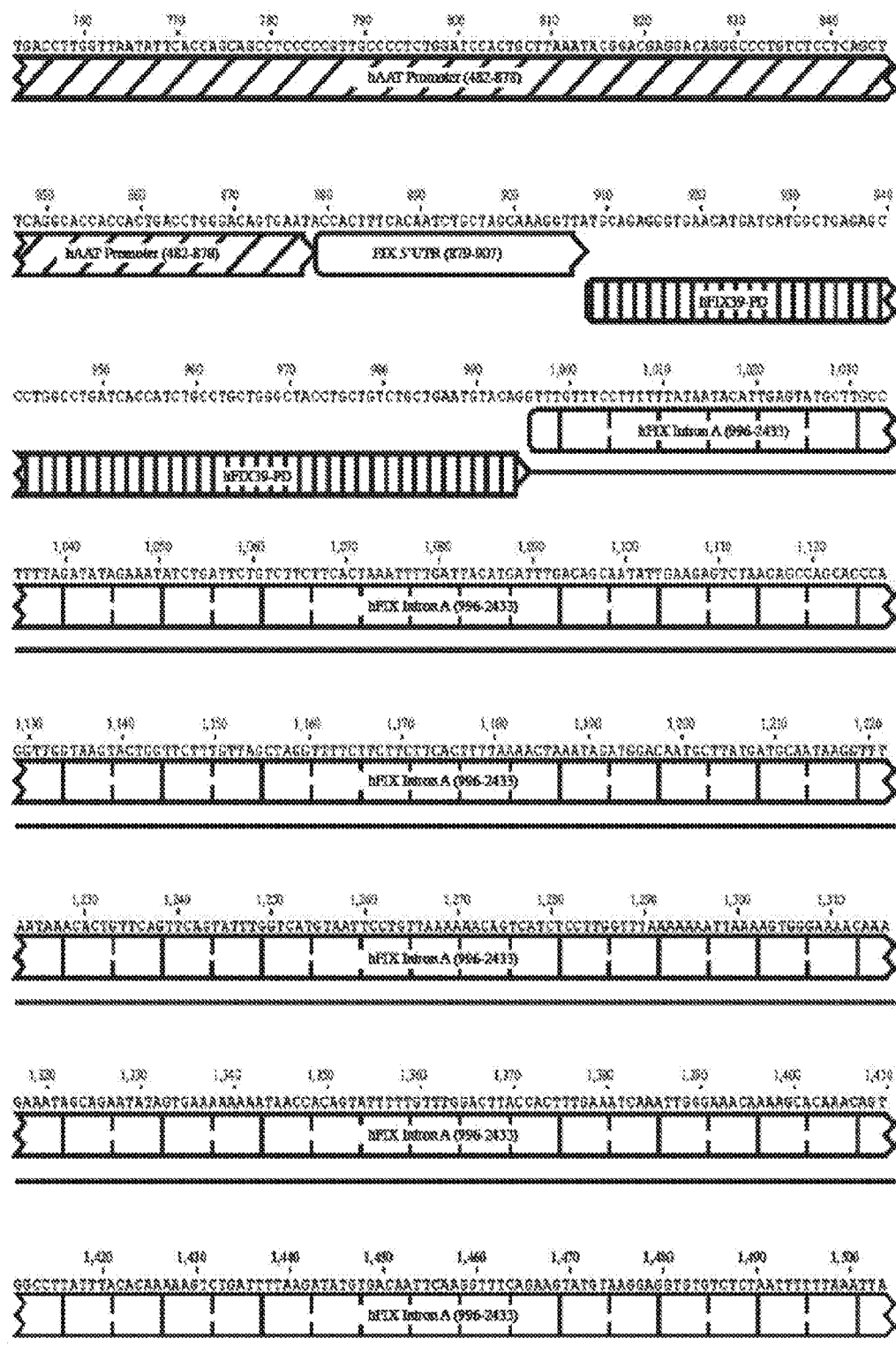


Figure 13 cont.

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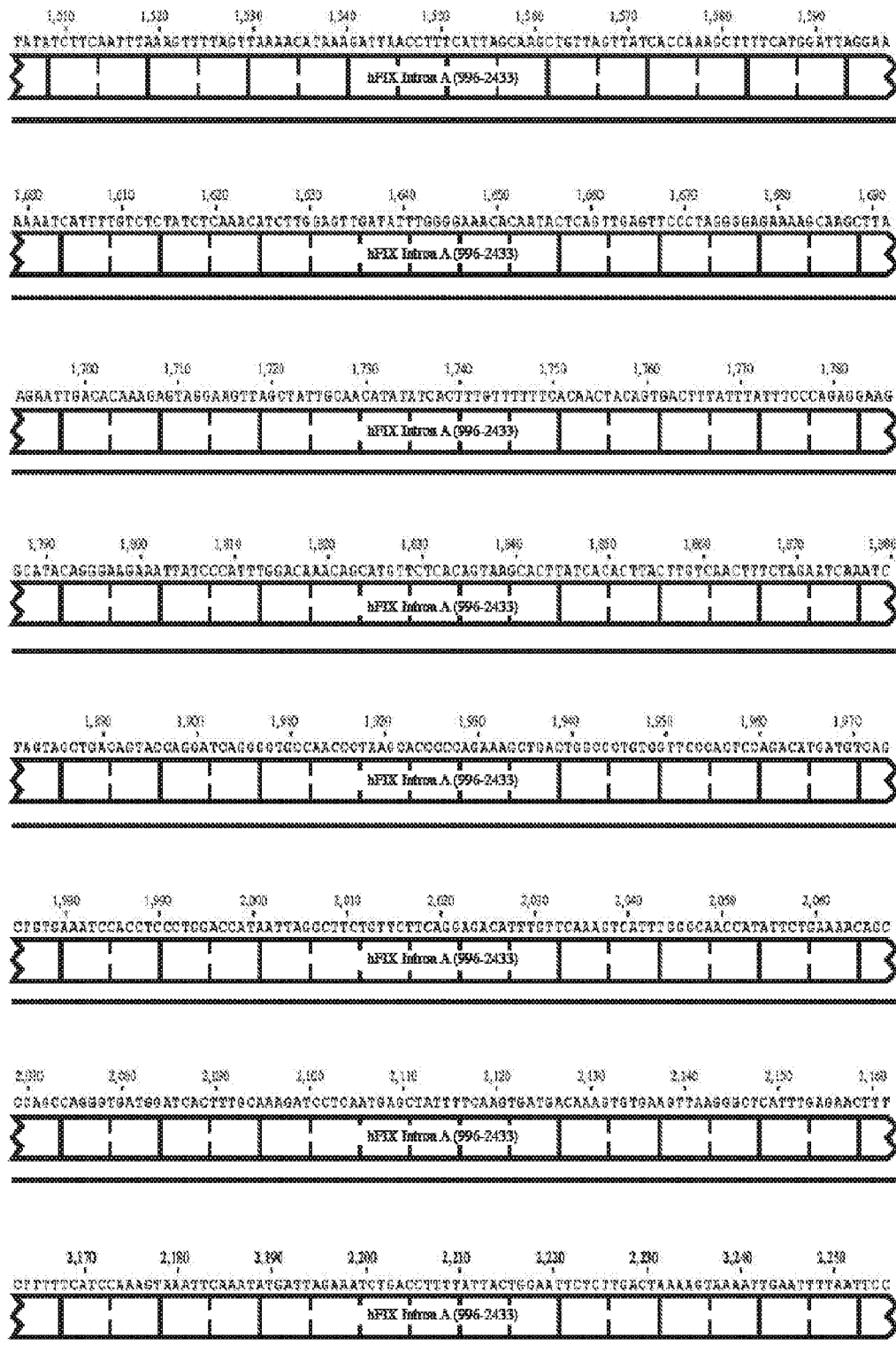
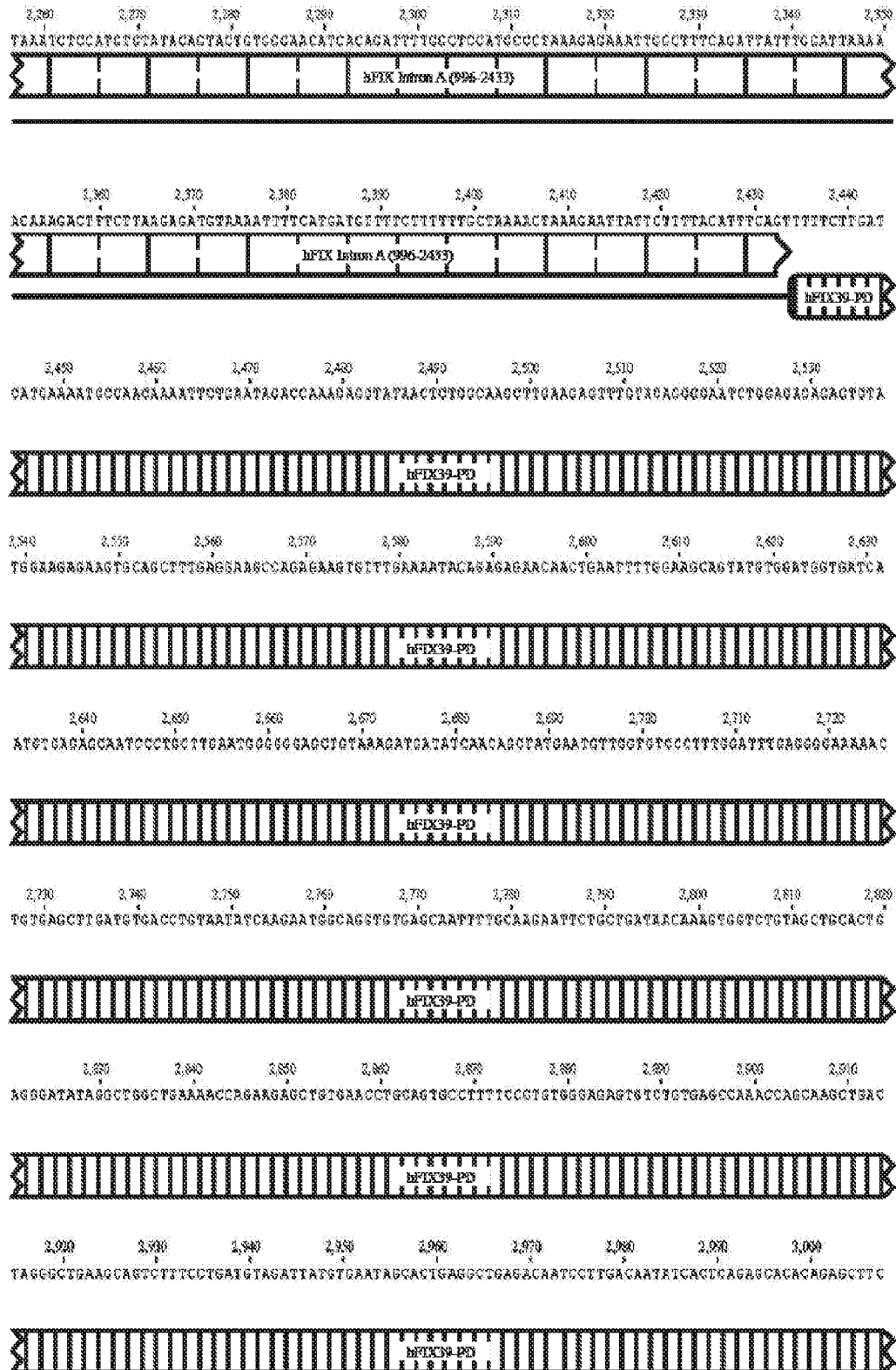


Figure 13 cont.

pAAV-ApoE haAT-FIX3



pAAV-ApoE hAAT-FIX3

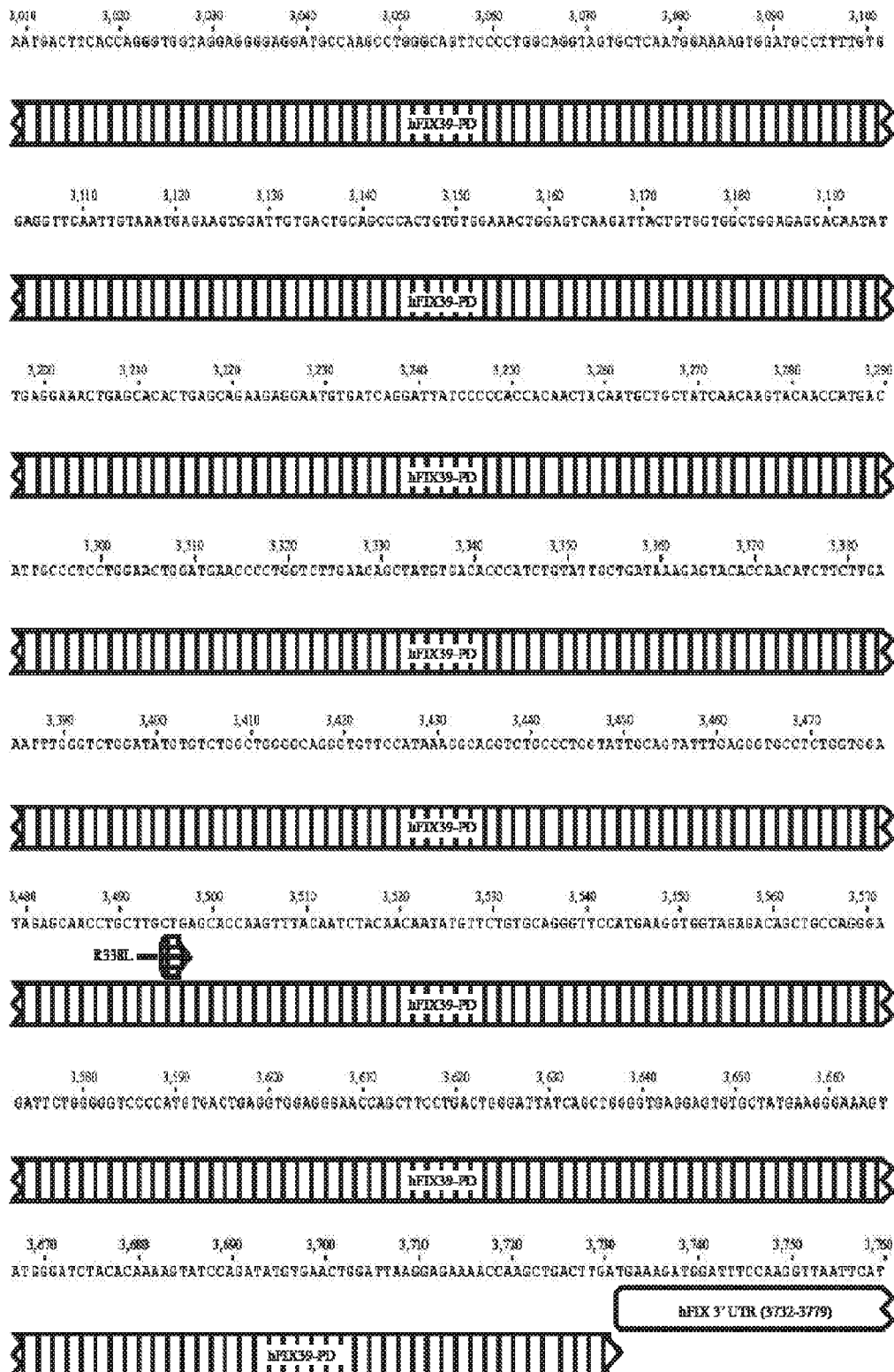


Figure 13 cont.

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↳ bFIX 3' UTR (3732-3779)

bGH poly A (3820-4047)

3,860 3,870 3,880 3,890 3,900 3,910 3,920 3,930 3,940

TSCCCTCTCCCTCTGCTTCTCTTCTGAGCCCTGGAAGGCTGACACTCCCACTGTCTTTCCTAATTAATAGAGAAATTCATCACATTGTCTGAGTAA

bGH poly A (3820-4047)

3,950 3,960 3,970 3,980 3,990 4,000 4,010 4,020 4,030 4,040

GGTGTCTATTCTATTCCTGGGGGCTGGGGGTGGGGCTAGGACAGCAGGGGAGGAGGATTGGGGAAGACATAGCAGGGCATGTCTGGGGGATGCACTGGGCTC

bGH poly A (3820-4047)

4,050 4,060 4,070 4,080 4,090 4,100 4,110 4,120 4,130

TATGGCTTCTGAGGCGAGAAAGAACCACTGGGGCTCGAGGATCCACTAGGGCCGCGAGGAGCCCTAGTGATGAGATTGGCCCTCTCCCTCTGTGGC

↳ bGH poly A (3820-4047)

AAATV ITR (1067-1204)

4,140 4,150 4,160 4,170 4,180 4,190 4,200 4,210 4,220 4,230

CGCTCGCTCGCTCACTCAAGGCTCCCGGGCTTTGCTCCGGGCGGCTCTAGTGAAGCAGAGCAGCGCCAGCTGCTCTCAAGGCGAGCTTCAAGGAA

AAATV ITR (1067-1204)

Lambda Shuffler (4219-8579)

4,240 4,250 4,260 4,270 4,280 4,290 4,300 4,310 4,320

ATACTAAGGCAAGGCTACTGCAAGTGCCTCGGCAACATTCGCTTATGGCGATTATTCCTTAGTGCGCGAGCGCCGGGGGCAAGATGCAGAGATTG

Lambda Shuffler (4219-8579)

4,330 4,340 4,350 4,360 4,370 4,380 4,390 4,400 4,410

GCATGGTACAGGCCGTGCGTTGATATTGCCAAACAGAGCTGTGGGGGAGATTGTCTCAGAAAGAGTGGCGAGATGCAGAGGCGTGGCTAT

Lambda Shuffler (4219-8579)

4,420 4,430 4,440 4,450 4,460 4,470 4,480 4,490 4,500

TCAAGGATGCCAGCAAGCCAGCAATATGCGCTGTGTAAGATGCTAATCCCAAGCTTACCCAGGCCAGCTGHTCAGGCACTGTTAAGCCGCTGT

Lambda Shuffler (4219-8579)

SUBSTITUTE SHEET (RULE 26)

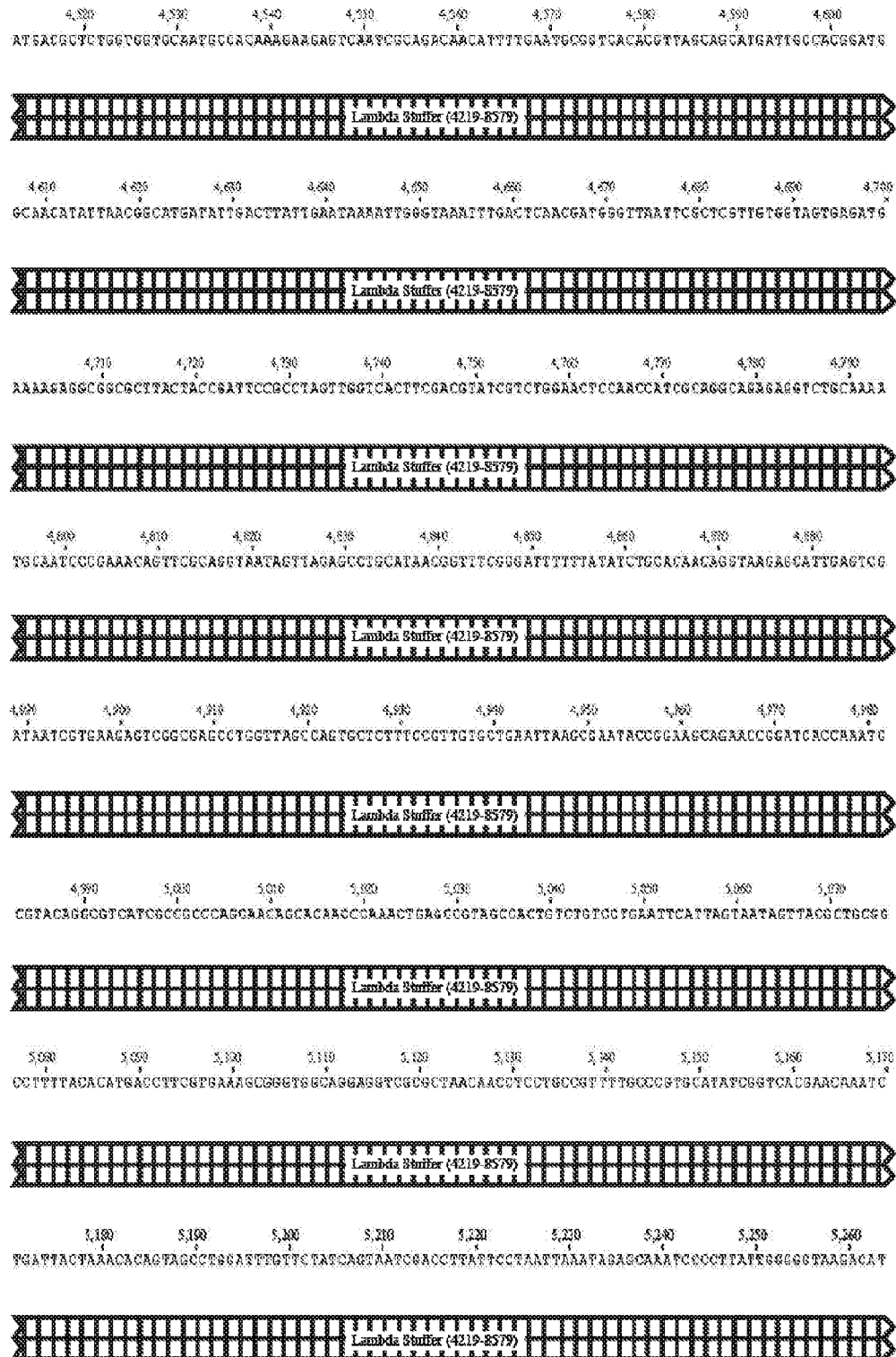
pAAV-ApoE haAT-FIX3

Figure 13 cont.

pAAV-ApoE haAT-FIX3

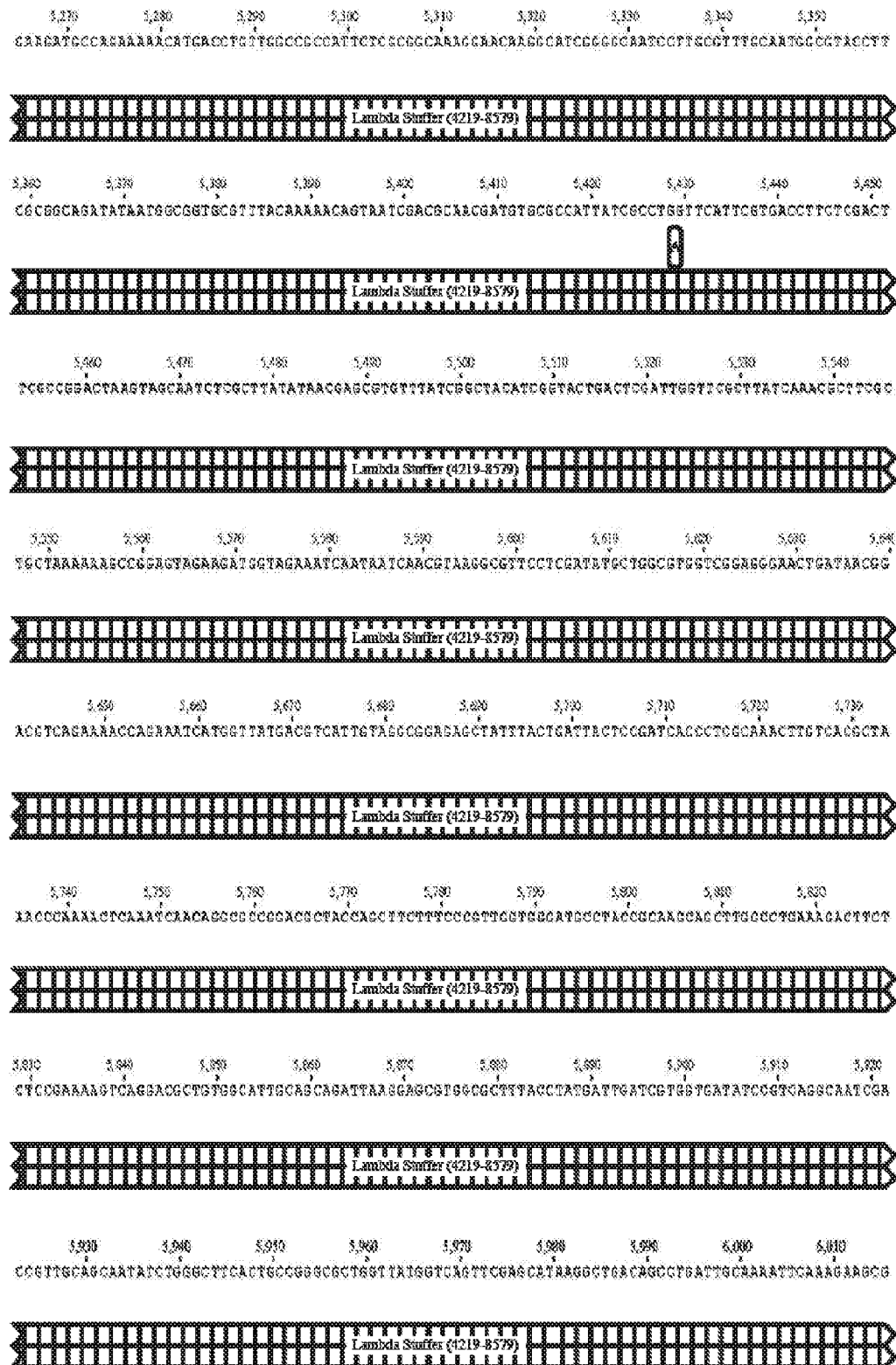
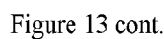


Figure 13 cont.



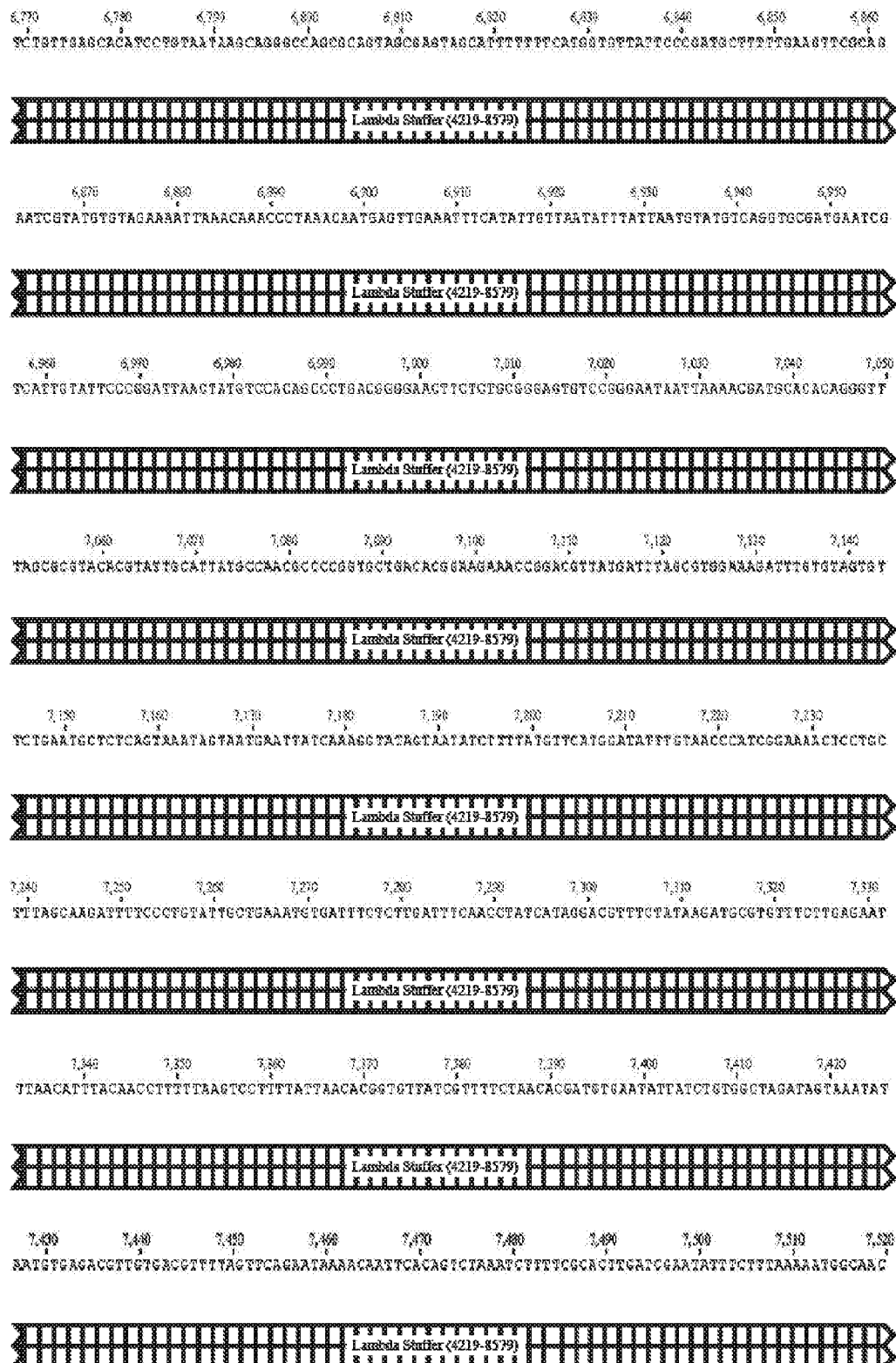
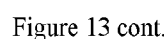
pAAV-ApoE haAT-FIX3

Figure 13 cont.



8,280 8,290 8,300 8,310 8,320 8,330 8,340 8,350 8,360

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8,370 8,380 8,390 8,400 8,410 8,420 8,430 8,440 8,450 8,460

TTCTTCGTTGACATGAGGTTGGCCCGGATTCGACTGTCGGTCAATTCGATTTGCTGTAAGTTGTTTTACGTTAACTTGATGCAGATCAATTATATA

8,470 8,480 8,490 8,500 8,510 8,520 8,530 8,540 8,550

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8,560 8,570 8,580 8,590 8,600 8,610 8,620 8,630 8,640

CTTTCGGTGTATCCGACAGTTACGGGGCGCGACCTGCTGATGCGGATTTTCTCCTTACGCATCTGTGCGGATATTCACACCGCGTACGTC

8,650 8,660 8,670 8,680 8,690 8,700 8,710 8,720 8,730 8,740

AAAGCAACCATAGTACGCGCCTGTAGCGCGCGATTAAACGCGCGGGTGTGTTGTTTACGCGCAACGTTACCGTTACACTTGCACGCGCTTA

8,750 8,760 8,770 8,780 8,790 8,800 8,810 8,820 8,830

GGGCGCGTCTCTTGGCTTTCTGCGCTTCTCTTCGCGACGTTGCGCGGCTTTCGCGTCAAGCTCTAAATCGGGGGCTCCTTTATGGGTTCC

8,840 8,850 8,860 8,870 8,880 8,890 8,900 8,910 8,920 8,930

GATTTAGTGTCTTACGCGACCTCGGACCCCAAAAACTTGATTTGSGTGATGTTTCAGGTAGTGGCCATCGGCCGTGATAGACGGTTTTCGCGCC

8,940 8,950 8,960 8,970 8,980 8,990 9,000 9,010 9,020

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8,280 8,290 8,300 8,310 8,320 8,330 8,340 8,350 8,360

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8,370 8,380 8,390 8,400 8,410 8,420 8,430 8,440 8,450 8,460

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8,470 8,480 8,490 8,500 8,510 8,520 8,530 8,540 8,550

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8,560 8,570 8,580 8,590 8,600 8,610 8,620 8,630 8,640

CTTTCGGTGTATCCGACAGTTACGGGGCGCGACCTGCTGATGCGGATTTTCTCCTTACGCATCTGTGCGGATATTCACACCGCGTACGTC

8,650 8,660 8,670 8,680 8,690 8,700 8,710 8,720 8,730 8,740

AAAGCAACCATAGTACGCGCCTGTAGCGCGCGATTAAACGCGCGGGTGTGTTGTTTACGCGCAACGTTACCGTTACACTTGCACGCGCTTA

8,750 8,760 8,770 8,780 8,790 8,800 8,810 8,820 8,830

GGGCGCGTCTCTTGGCTTTCTGCGCTTCTCTTCGCGACGTTGCGCGGCTTTCGCGTCAAGCTCTAAATCGGGGGCTCCTTTATGGGTTCC

8,840 8,850 8,860 8,870 8,880 8,890 8,900 8,910 8,920 8,930

GATTTAGTGTCTTACGCGACCTCGGACCCCAAAAACTTGATTTGSGTGATGTTTCAGGTAGTGGCCATCGGCCGTGATAGACGGTTTTCGCGCC

8,940 8,950 8,960 8,970 8,980 8,990 9,000 9,010 9,020

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SUBSTITUTE SHEET (RULE 26)

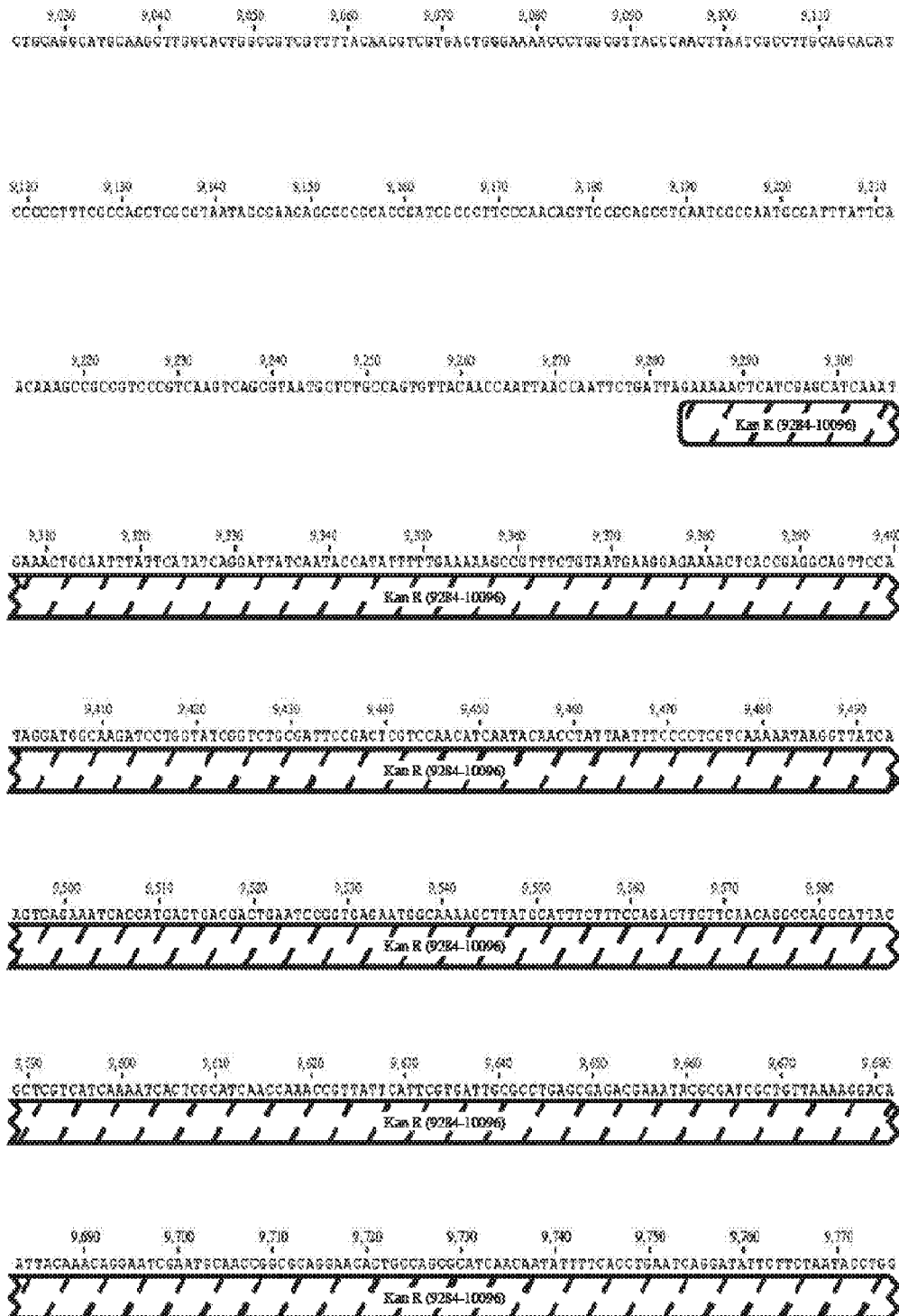
pAAV-ApoE hAAT-FIX3

Figure 13 cont.

pAAV-ApoE haAT-FIX3

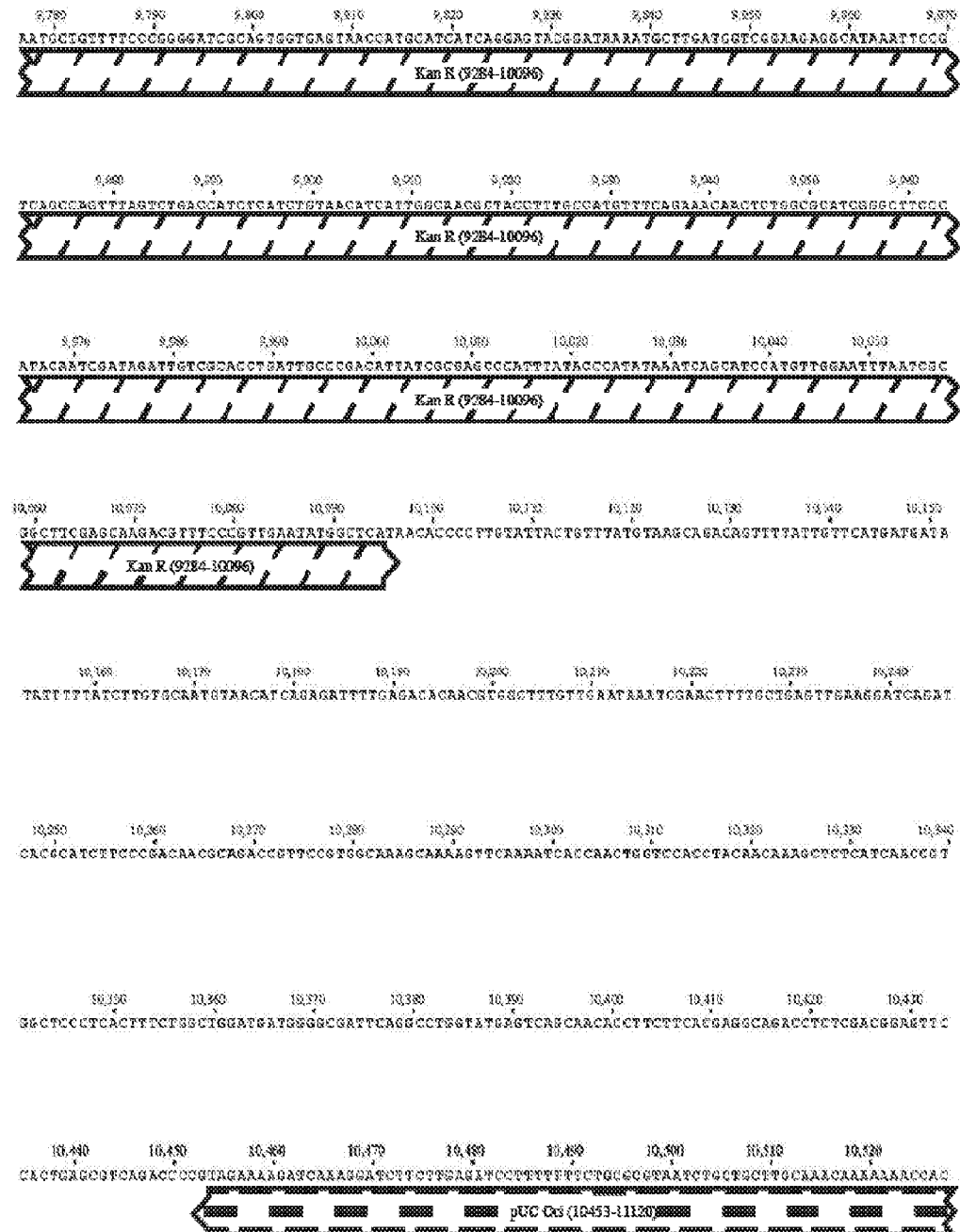


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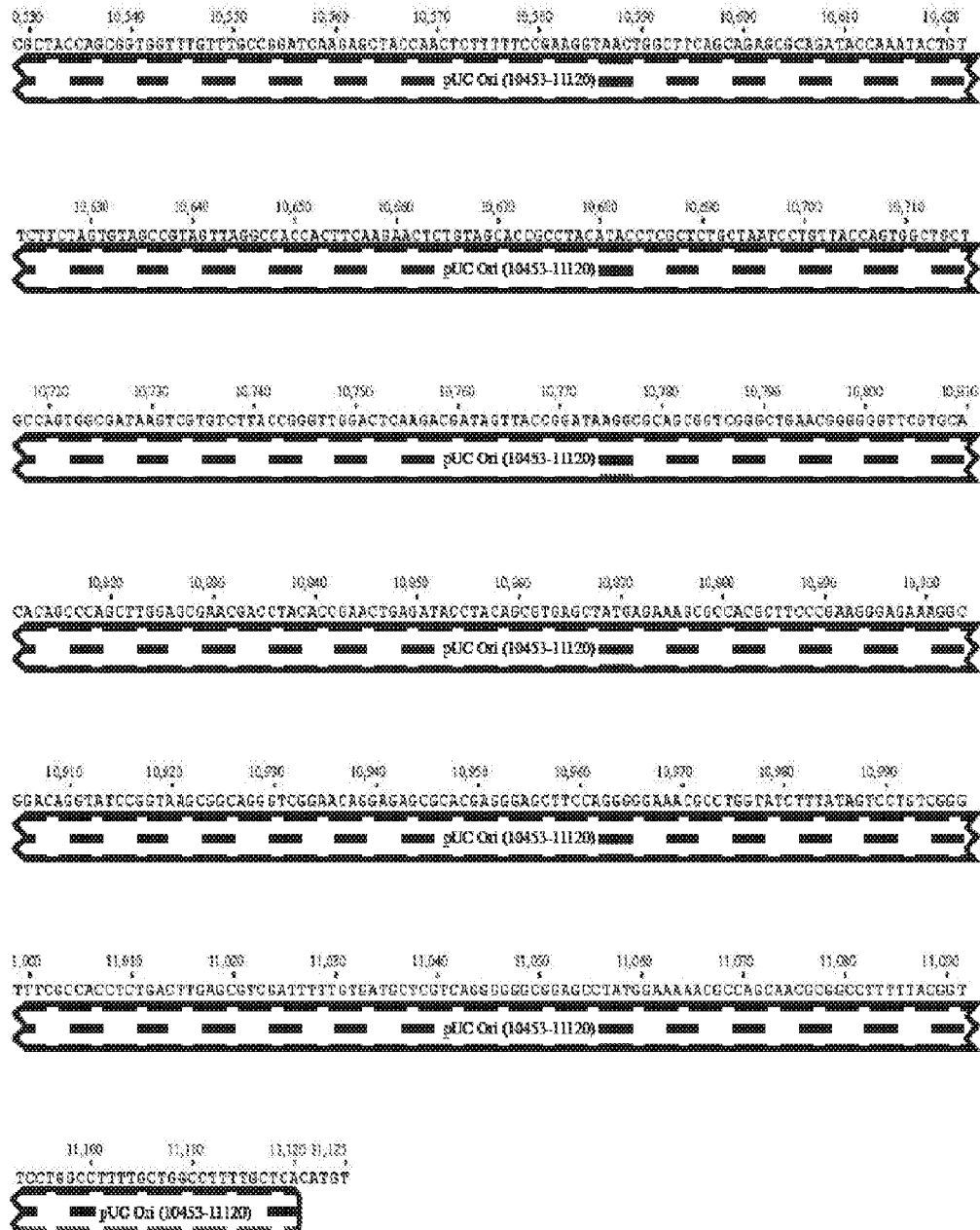
pAAV-ApoE_hAAT-FIX3

Figure 13 cont.

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TCCCTGGACCATAATTAGGCTTCTGTTCTTCAGGAGACATTTGTTCAAAGTCATTTGGGCAACCATA
TTCTGAAAACAGCCCAGCCAGGGTGATGGATCACTTTGCAAAGATCCTCAATGAGCTATTTTCAAG
TGATGACAAAGTGTGAAGTTAAGGGCTCATTTGAGAACTTTCTTTTTCATCCAAAGTAAATTCAAA
TATGATTAGAAATCTGACCTTTTATTACTGGAATTCTCTTGACTAAAAGTAAAATTGAATTTAATT
CCTAAATCTCCATGTGTATACAGTACTGTGGGAACATCACAGATTTTGGCTCCATGCCCTAAAGAG
AAATTGGCTTTCAGATTATTTGGATTAAAAACAAAGACTTTCTTAAGAGATGTAAAATTTTCATGA
TGTTTTCTTTTTTGCTAAAACTAAAGAATTATTCTTTTACATTTTCAG

Figure 14

FIX39 nucleic acid sequence including intron A (intron A is underlined) (SEQ ID NO:25)

ATGCAGAGGGTGAACATGATCATGGCTGAGAGCCCTGGCCTGATCACCATCTGCCTGCTGGGCTAC
 CTGCTGTCTGCTGAATGTACAGGTTTGTTCCTTTTTTATAATACATTGAGTATGCTTGCCTTTTAGA
TATAGAAATATCTGATTCTGTCTTCTTCACTAAATTTTGATTACATGATTTGACAGCAATATTGAAG
AGTCTAACAGCCAGCACCCAGGTTGGTAAGTACTGGTTCTTTGTTAGCTAGGTTTTCTTCTTCTTCA
CTTTTAAACTAAATAGATGGACAATGCTTATGATGCAATAAGGTTTAATAAACACTGTTTCAGTTC
AGTATTTGGTCATGTAATTCCTGTTAAAAAACAGTCATCTCCTTGGTTTAAAAAAATTAAAAAGTGG
GAAAACAAAGAAATAGCAGAATATAGTGAATAAAAAATAACCACAGTATTTTTGTTTGGACTTACC
ACTTTGAAATCAAATTGGGAAACAAAAGCACAAACAGTGGCCTTATTTACACAAAAAGTCTGATT
TTAAGATATGTGACAATTCAAGGTTTCAGAAAGTATGTAAGGAGGTGTGTCTCTAATTTTTTAAATT
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ATCACCAAAGCTTTTCATGGATTAGGAAAAAATCATTGTGTCTCTATCTCAAACATCTTGGAGTTG
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ACAAAGAGTAGGAAGTTAGCTATTGCAACATATATCACTTTGTTTTTTCACAACTACAGTGACTTT
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 ATCTGTATTGCTGATAAAGAGTACACCAACATCTTCTTGAATTTGGGTCTGGATATGTGTCTGGCT
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 ACCAGCTTCTGACTGGGATTATCAGCTGGGGTGAGGAGTGTGCTATGAAGGGAAAGTATGGGAT
 CTACACAAAAGTATCCAGATATGTGAACTGGATTAAAGGAGAAAACCAAGCTGACTTGA

Figure 15

Transduction efficiency of the AAV-4-1 variant capsid (SEQ ID NO:4) analyzed in an *in vitro* setting

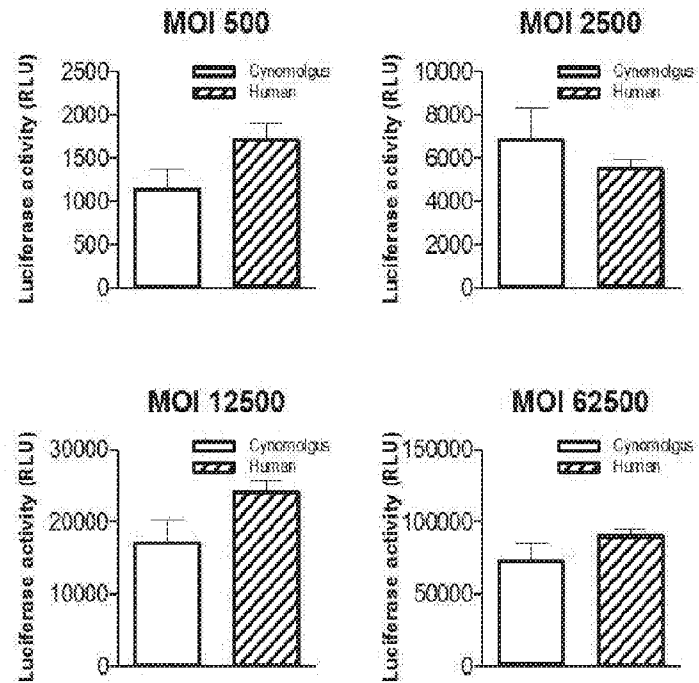


Figure 16

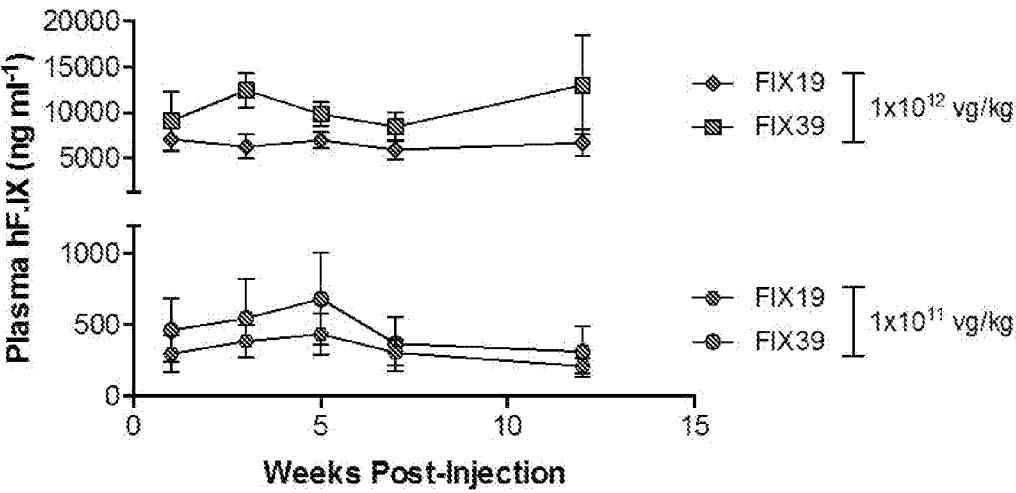


Figure 17

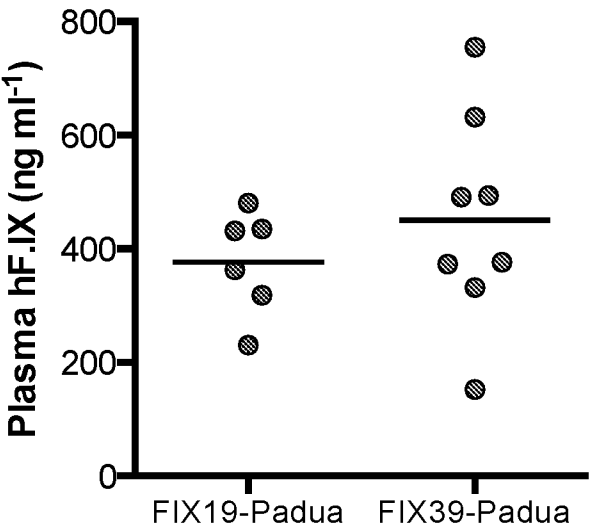


Figure 18

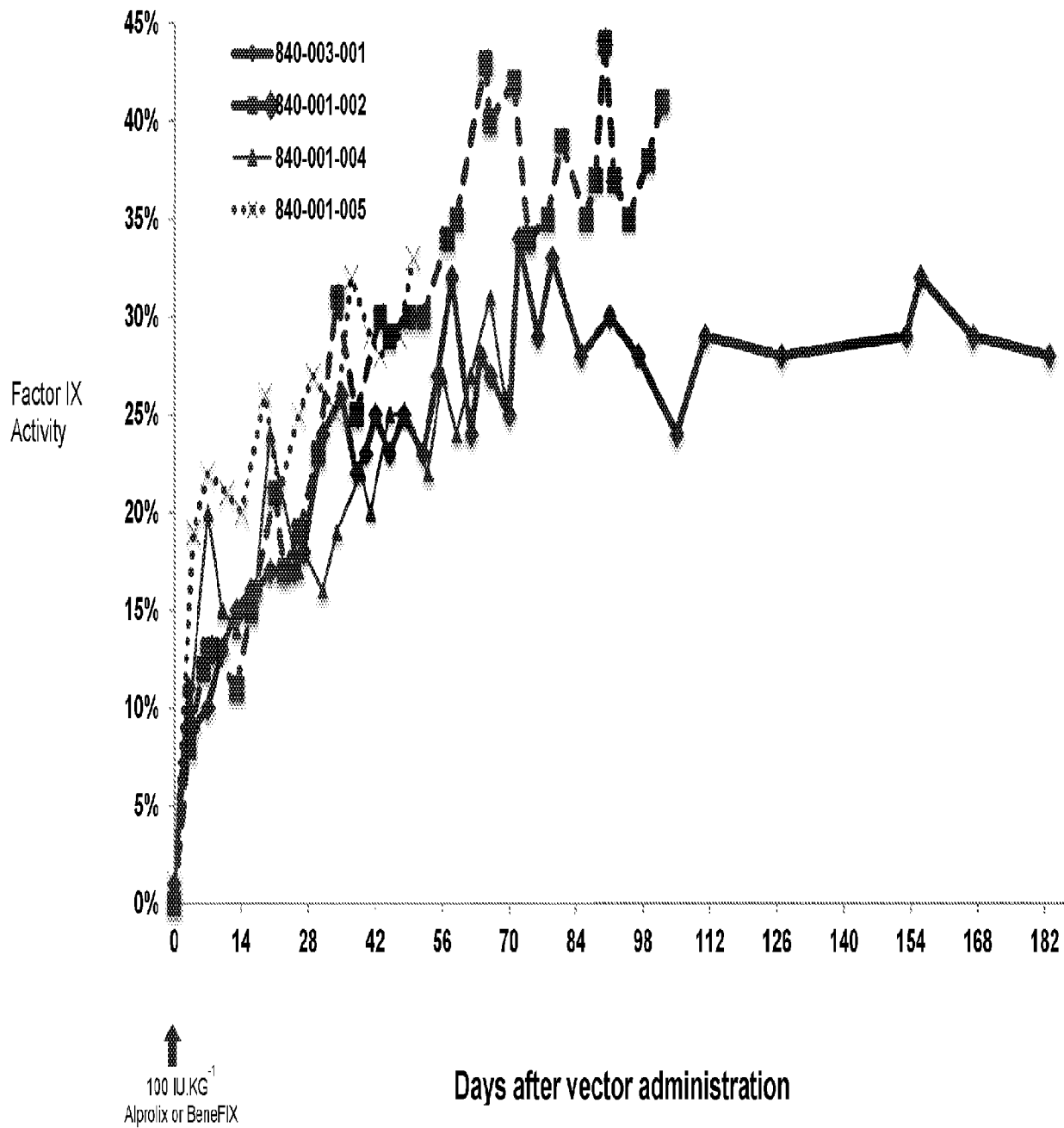
Comparison of early FIX:C activity levels for first 4 Subjects

Figure 19

AAV-FIX39-Padua: 1st subject day 183 FIX:C activity level at 28%

Subject 1 [5×10^{11} vg/kg] at 183 days since last Alprolix infusion

Dose: 4.08×10^{13} vg of AAV-FIX39-Padua + 2.01×10^{14} cp of Empty Capsids [1:5]

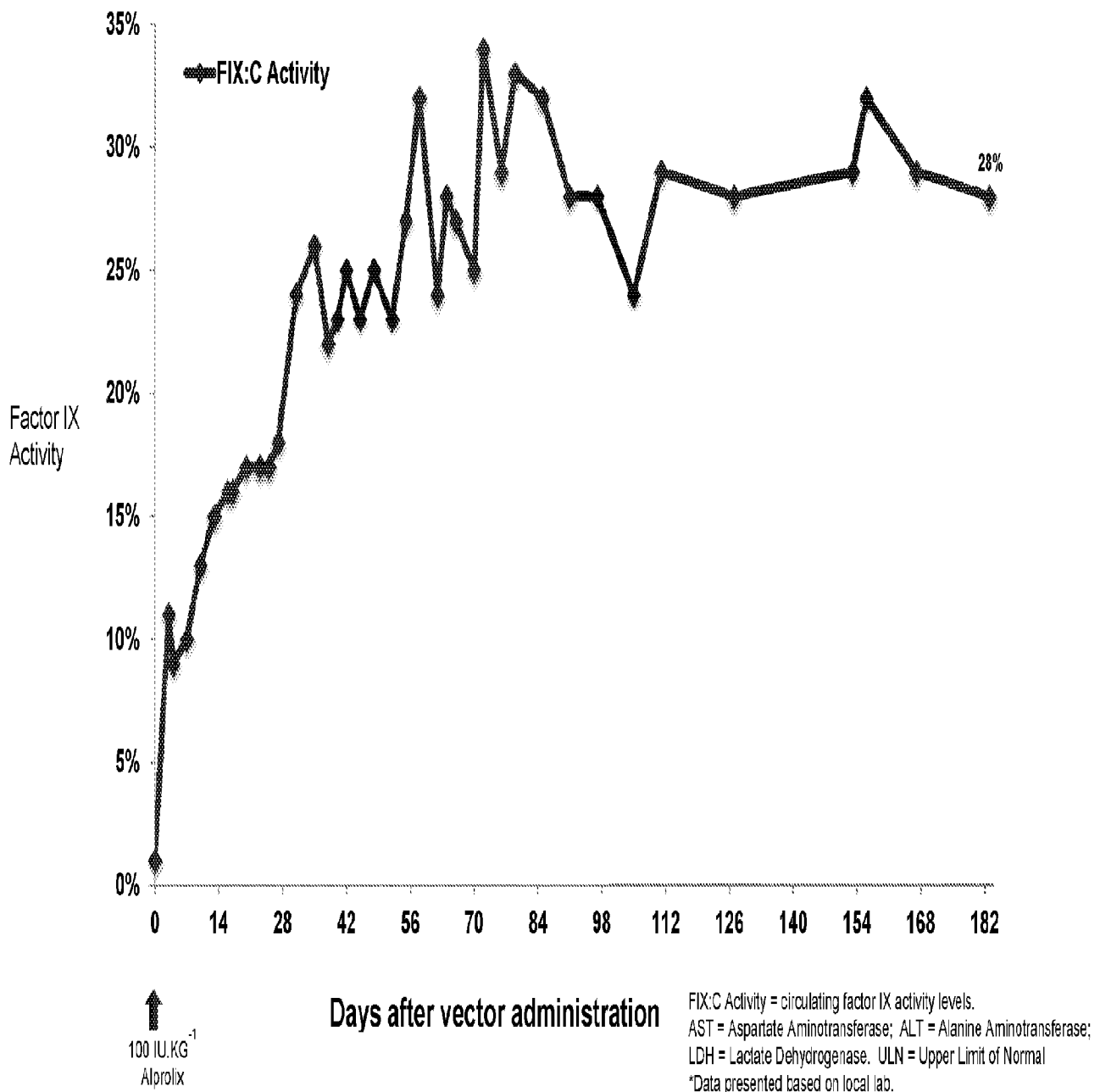


Figure 20A

AAV-FIX39-Padua: 1st subject day 183 Liver Functions

Subject 1 [5×10^{11} vg/kg] at 183 days since last Alprolix infusion

4.08×10^{13} vg of AAV-FIX39-Padua + 2.01×10^{14} cp of Empty Capsids [1:5]

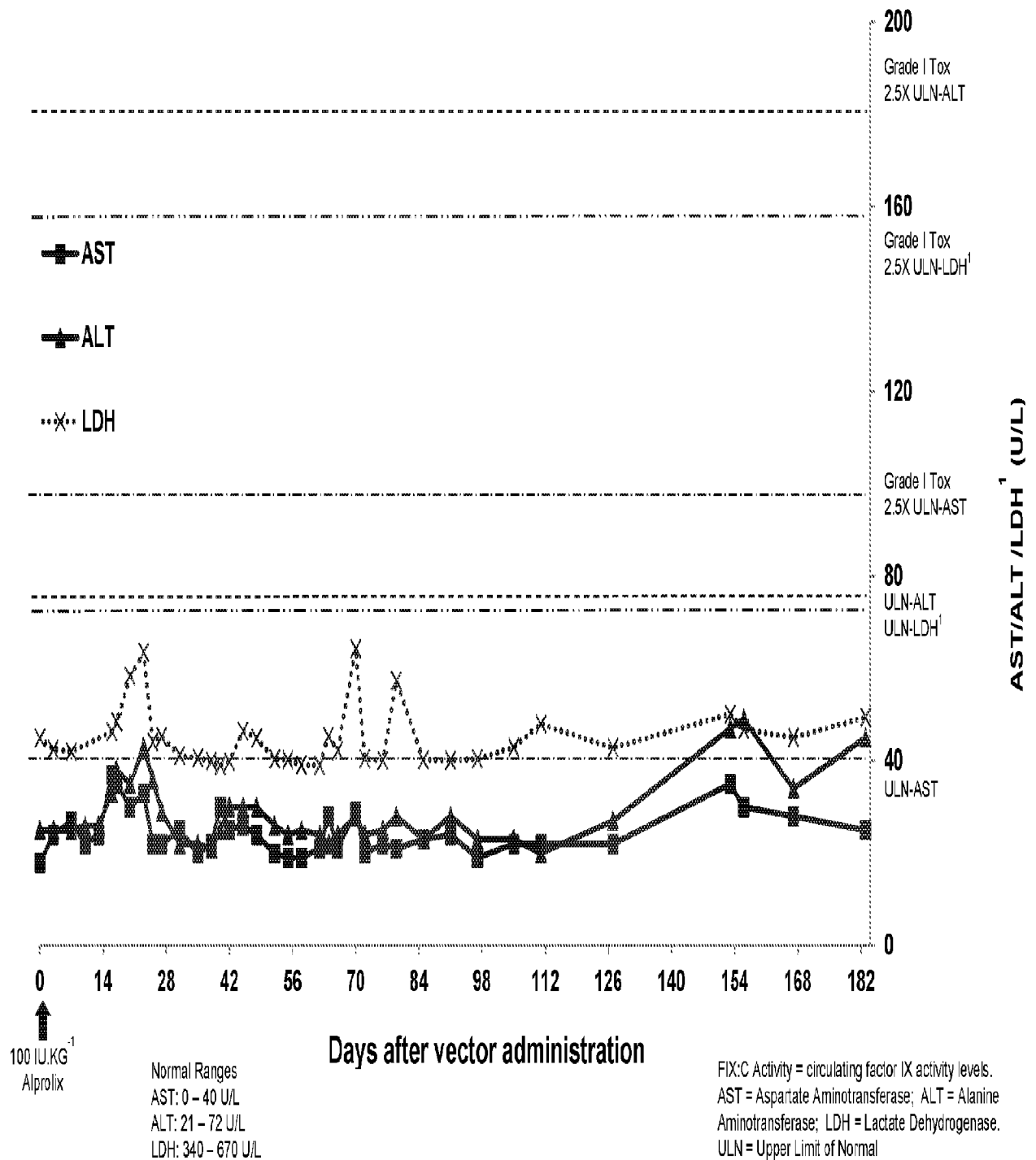


Figure 20B

AAV-FIX39-Padua: 2nd subject day 102 FIX:C Activity Level at 41%

Subject 2 [5×10^{11} vg/kg] at 102 days since last BeneFIX infusion

Dose: 2.84×10^{13} vg of AAV-FIX39-Padua + 1.39×10^{14} cp of Empty Capsids [1:5]

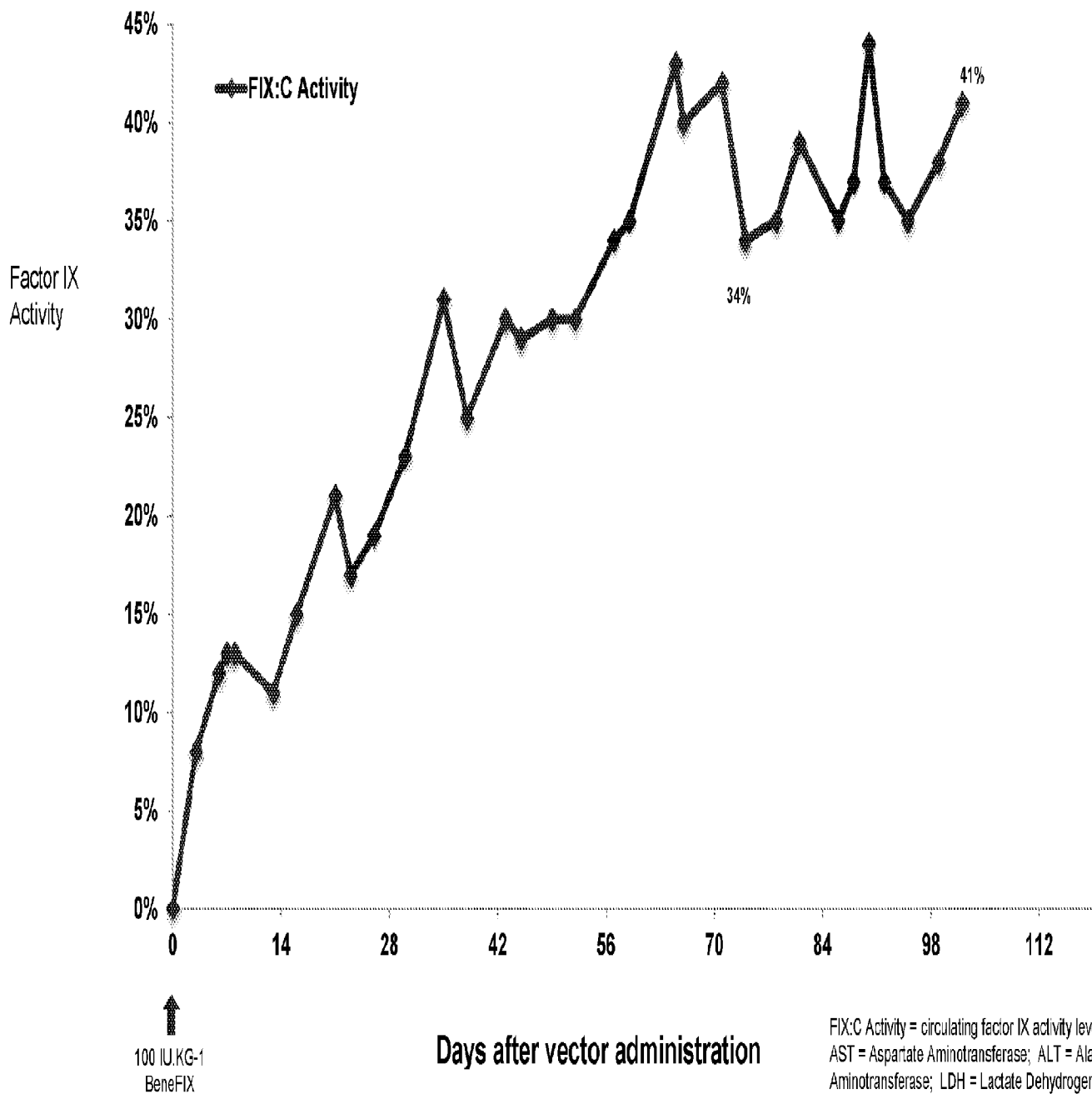


Figure 21A

AAV-FIX39-Padua: 2nd subject day 102 Liver Functions

Subject 2 [5×10^{11} vg/kg] at 102 days since last BeneFIX infusion

2.84×10^{13} vg of AAV-FIX39-Padua + 1.39×10^{14} cp of Empty Capsids [1:5

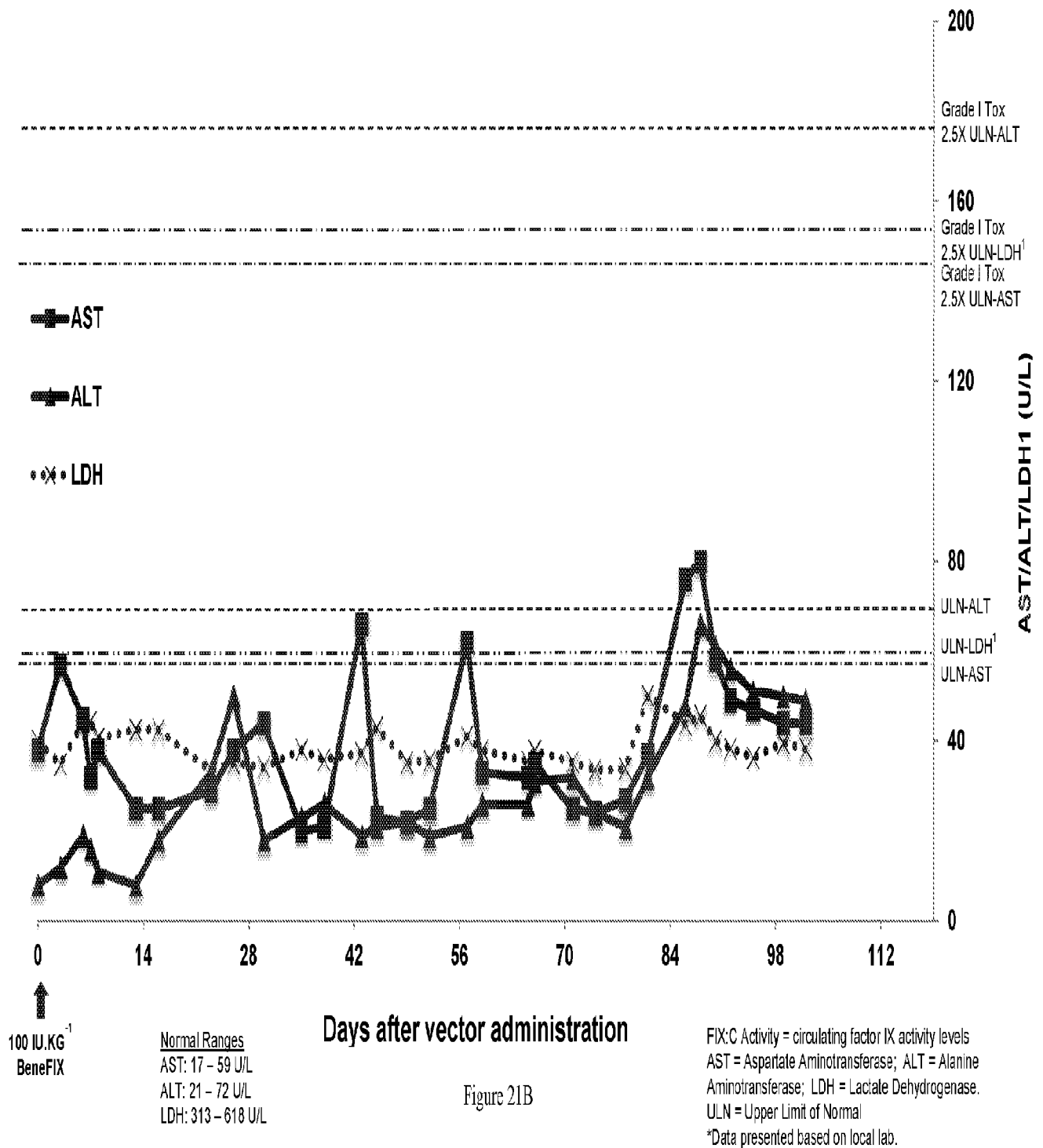


Figure 21B

AAV-FIX39-Padua: 3rd subject day 69 FIX:C Activity Level at 26%

Subject 3 [5×10^{11} vg/kg] at 67 days since last Alprolix infusion

5.38×10^{13} vg of AAV-FIX39-Padua + 1.93×10^{14} cp of Empty Capsids [1:4]

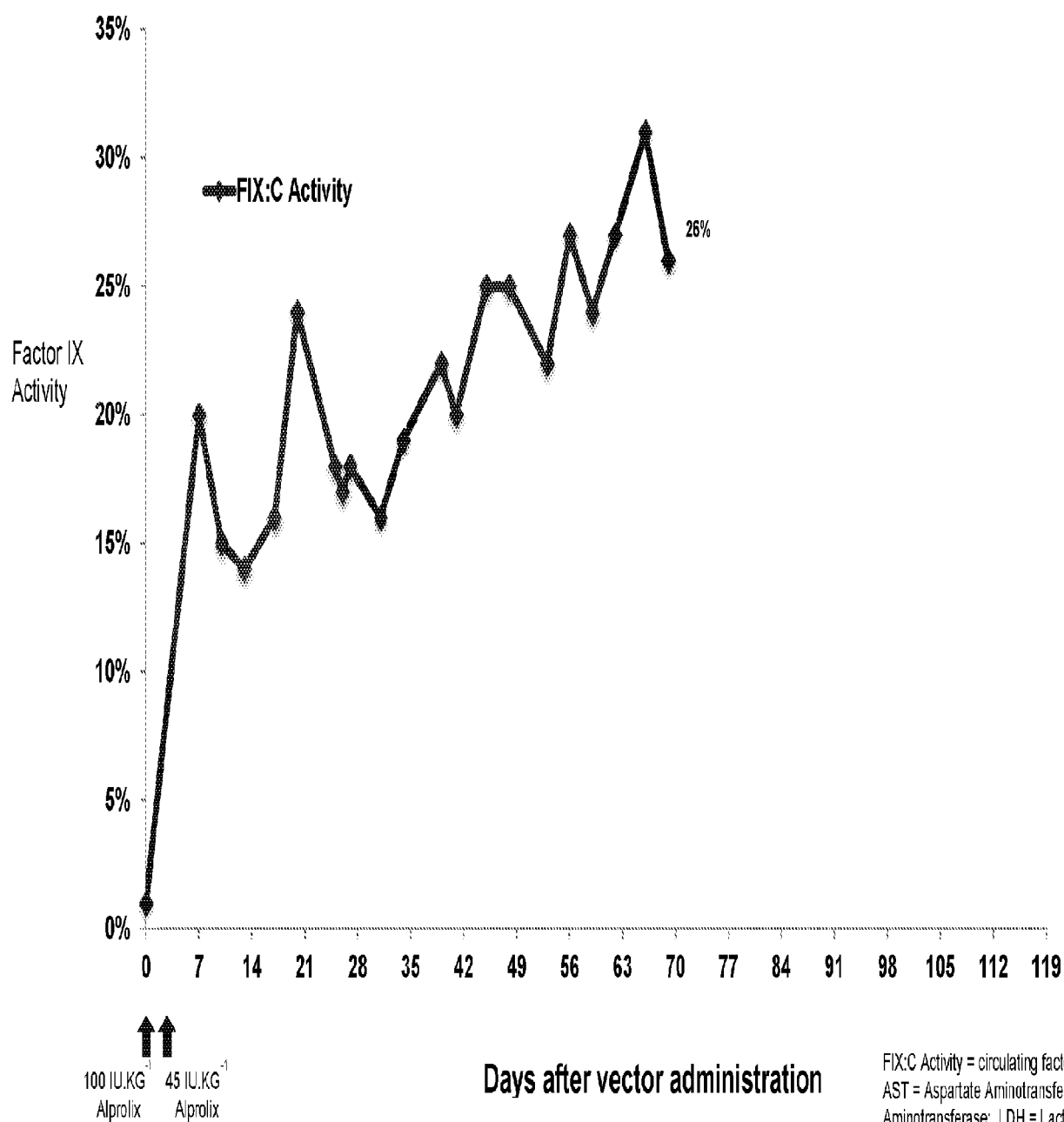
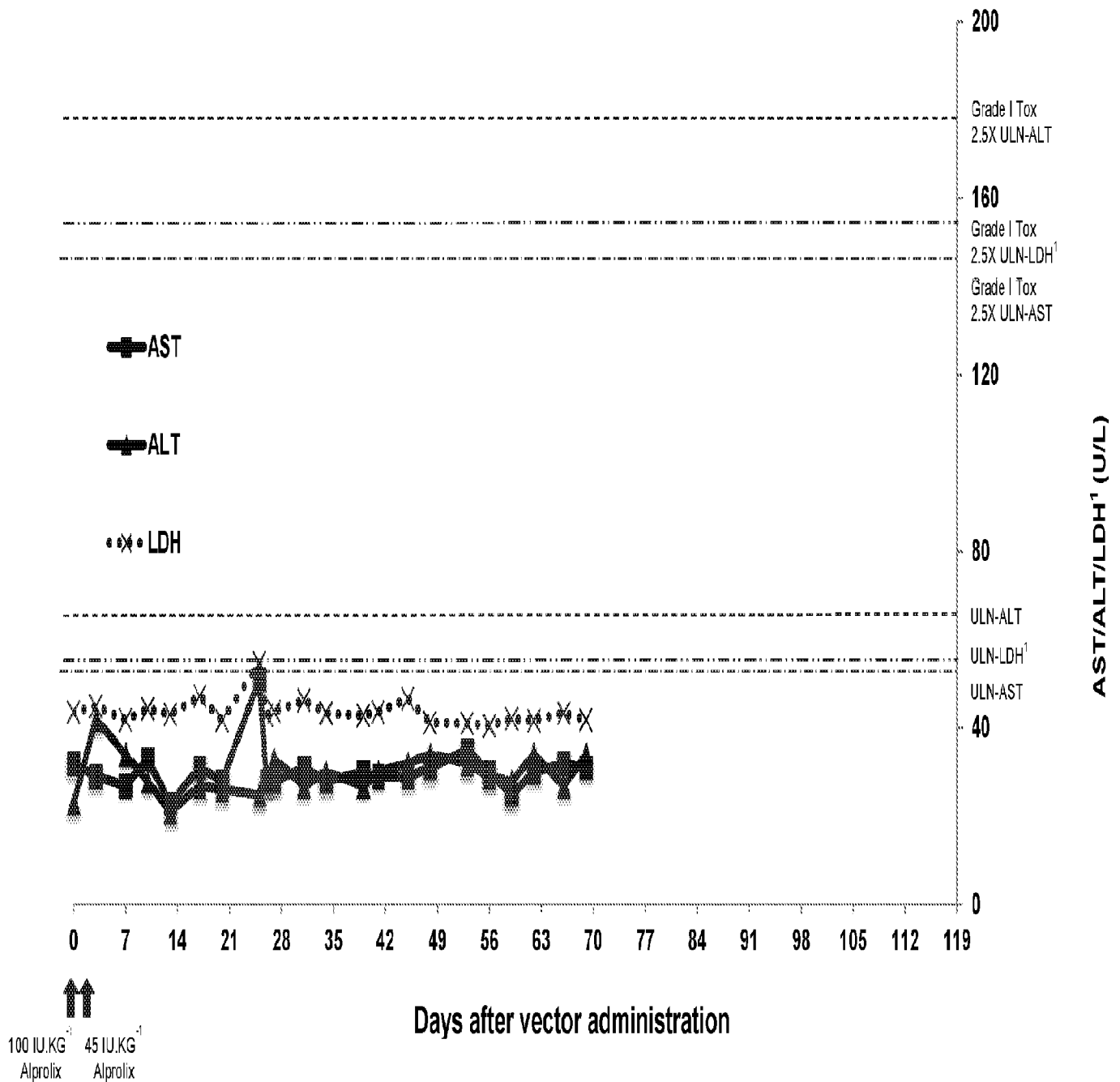


Figure 22A

FIX:C Activity = circulating factor IX activity levels.
 AST = Aspartate Aminotransferase; ALT = Alanine Aminotransferase; LDH = Lactate Dehydrogenase.
 ULN = Upper Limit of Normal
 *Data presented based on local lab.

AAV-FIX39-Padua: 3rd subject day 69 Liver Functions
 Subject 3 [5x10¹¹ vg/kg] at 67 days since last Alprolix infusion
 5.38x10¹³ vg of AAV-FIX39-Padua + 1.93x10¹⁴ cp of Empty Capsids [1:4]



Normal Ranges

AST: 17 – 59 U/L

ALT: 21 – 72 U/L

LDH: 313 – 618 U/L

Figure 22B

FIX:C Activity = circulating factor IX activity levels.
 AST = Aspartate Aminotransferase; ALT = Alanine Aminotransferase; LDH = Lactate Dehydrogenase.
 ULN = Upper Limit of Normal
 *Data presented based on local lab.

AAV-FIX39-Padua: 4th subject day 50 FIX:C Activity Level at 33%

Subject 4 [5×10^{11} vg/kg] at 50 days since last BeneFIX infusion

5.57×10^{13} vg of AAV-FIX39-Padua + 2.22×10^{14} cp of Empty Capsids [1:4]

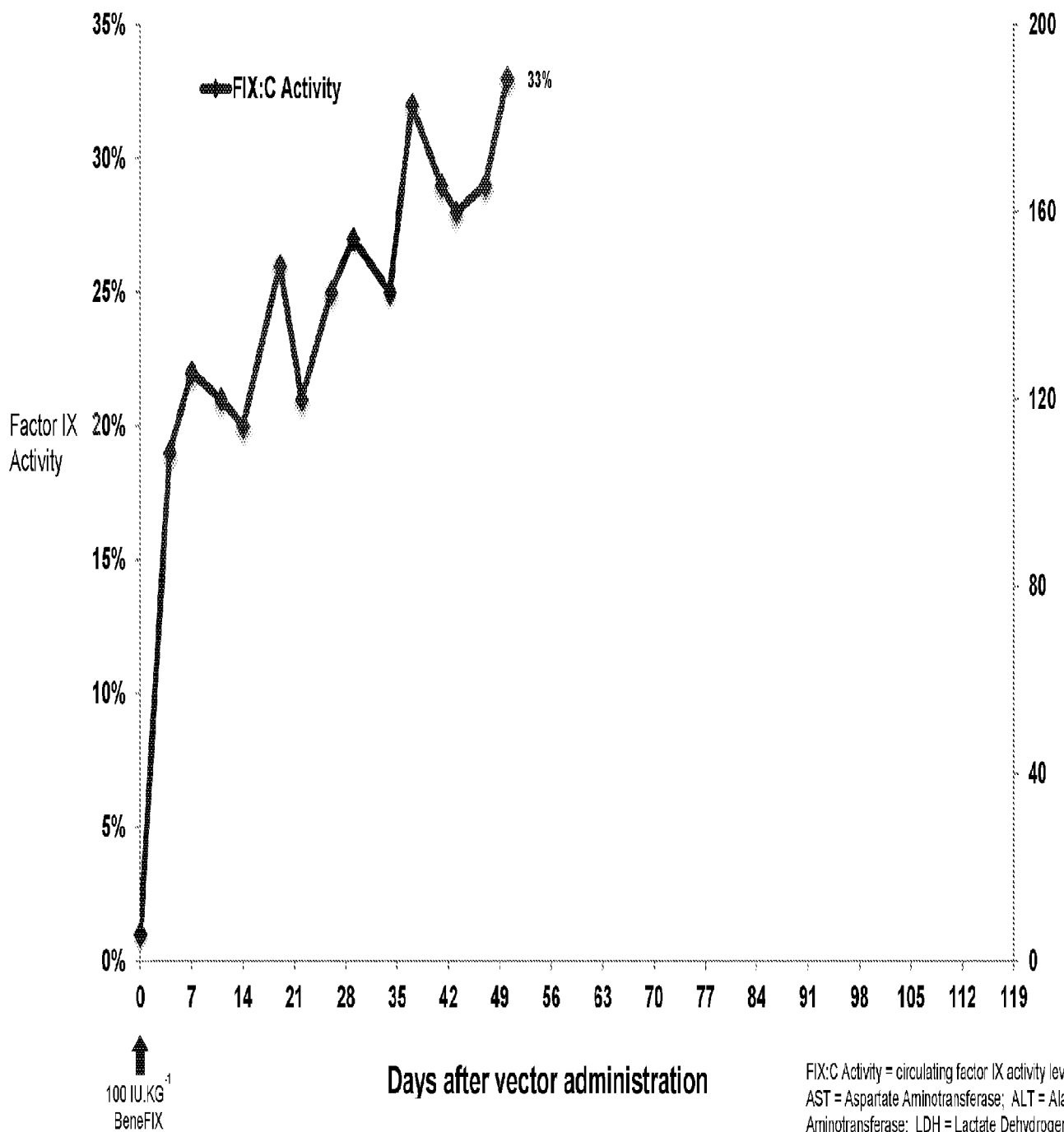


Figure 23A

FIX:C Activity = circulating factor IX activity levels.
 AST = Aspartate Aminotransferase; ALT = Alanine
 Aminotransferase; LDH = Lactate Dehydrogenase.
 ULN = Upper Limit of Normal
 *Data presented based on local lab.

AAV-FLX39-Padua: 4th subject day 50 Liver Functions

Subject 4 [5×10^{11} vg/kg] at 50 days since last BeneFIX infusion

5.57×10^{13} vg of AAV-FLX39-Padua + 2.22×10^{14} cp of Empty Capsids [1:4]

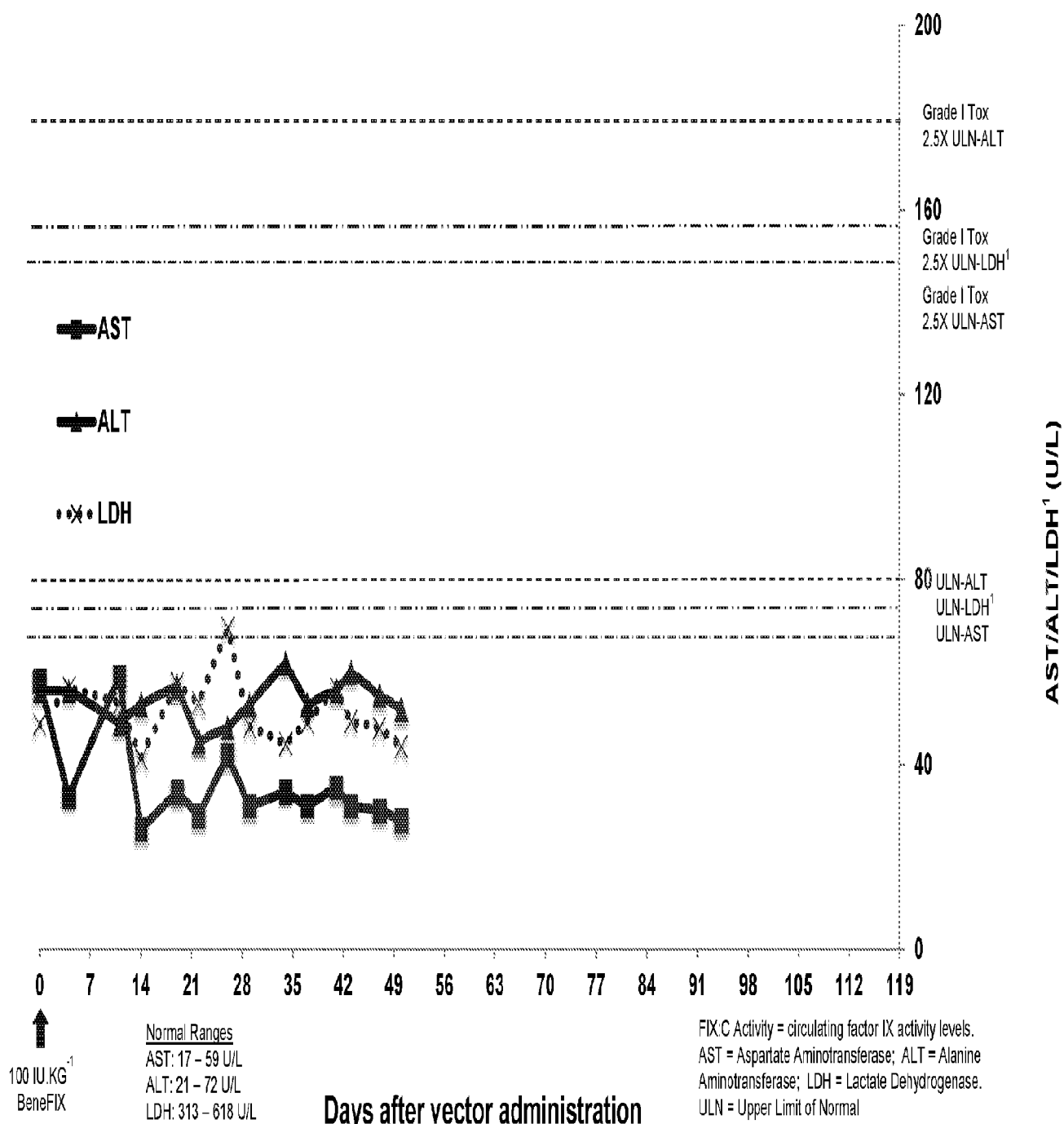


Figure 23B

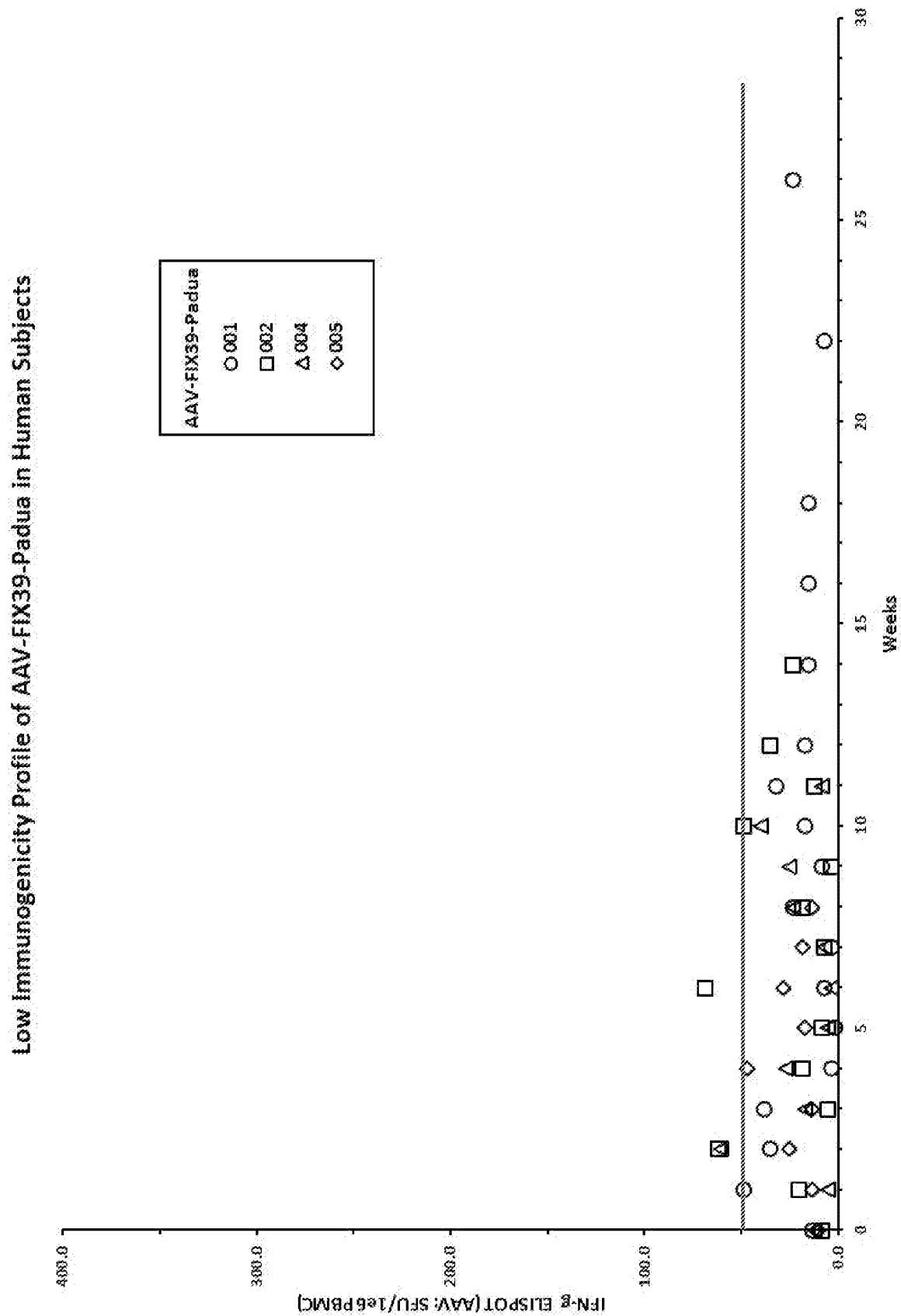


Figure 24A

Comparative Immunogenicity of AAV Vectors in Human Subjects

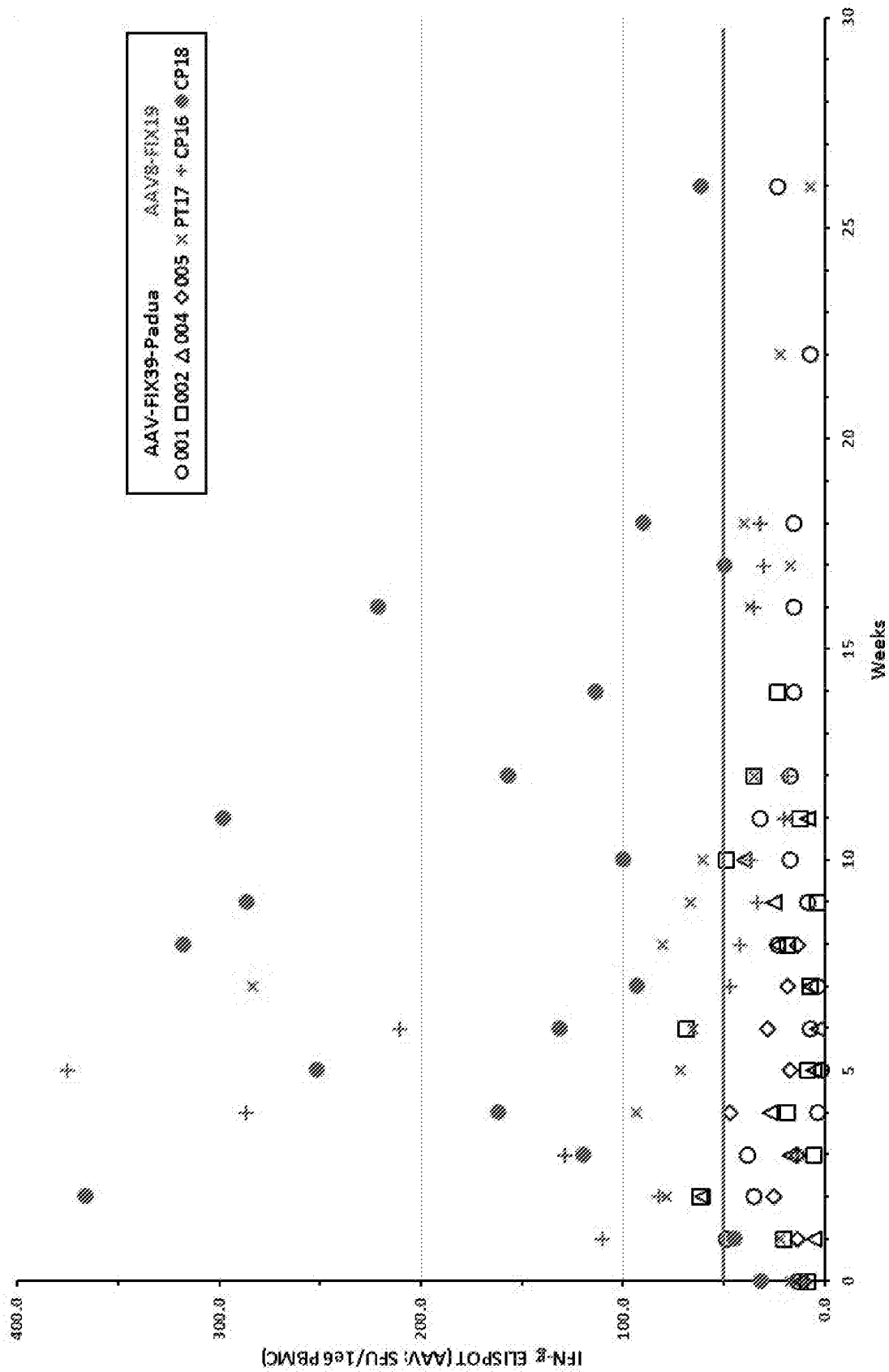


Figure 24B