

Figure 1A

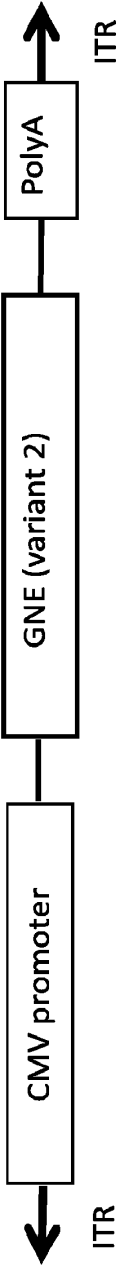


Figure 1B



Figure 1C

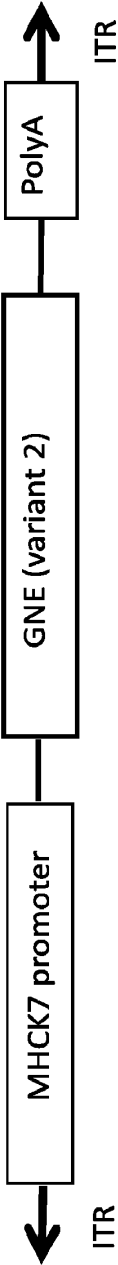


Figure 1D

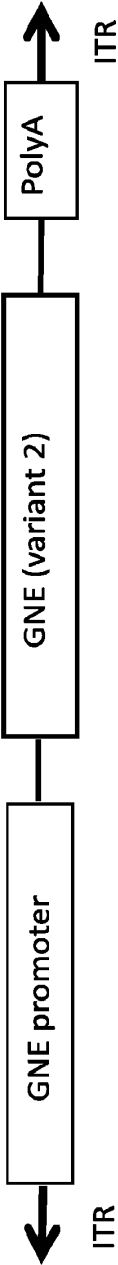


Figure 1E

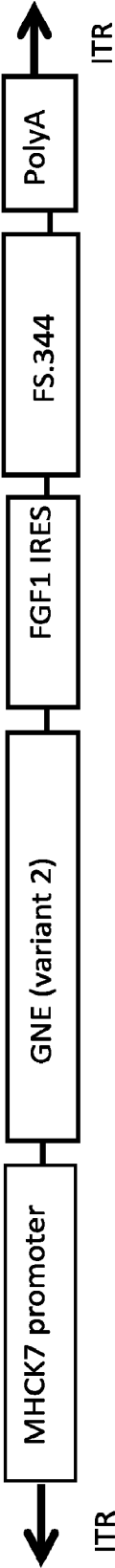


Figure 1F

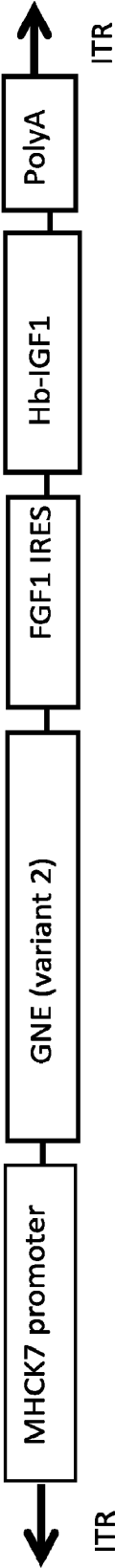


Figure 1G

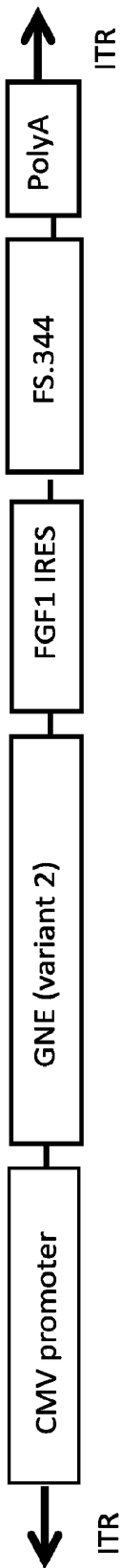


Figure 1H

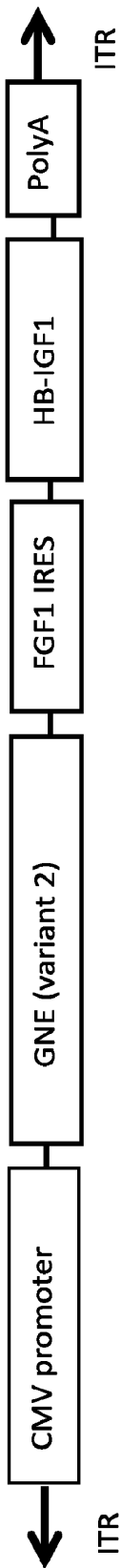


Figure 1I

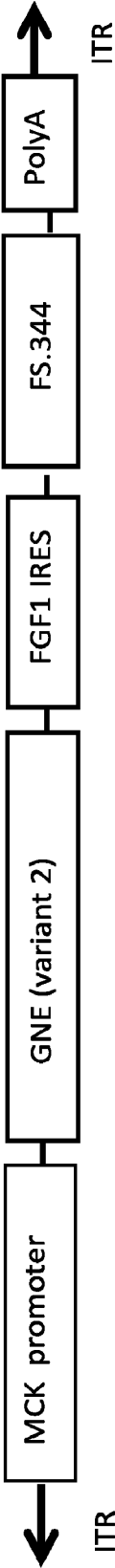


Figure 1J

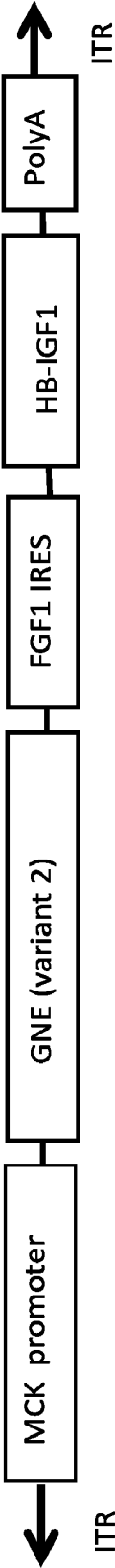


Figure IK

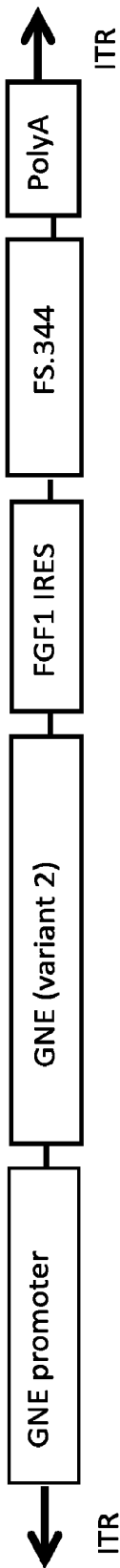


Figure 1L

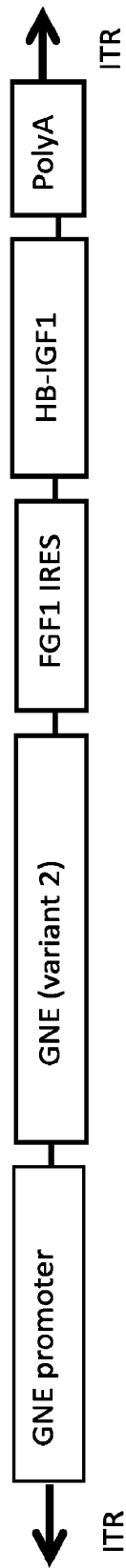


Figure 1M

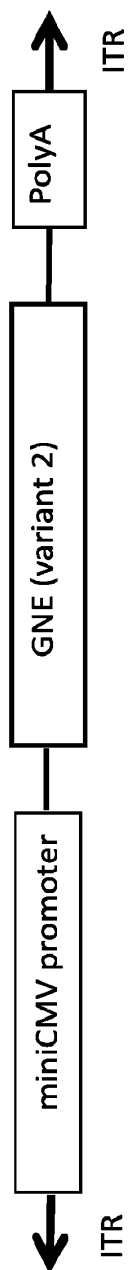


Figure 1N

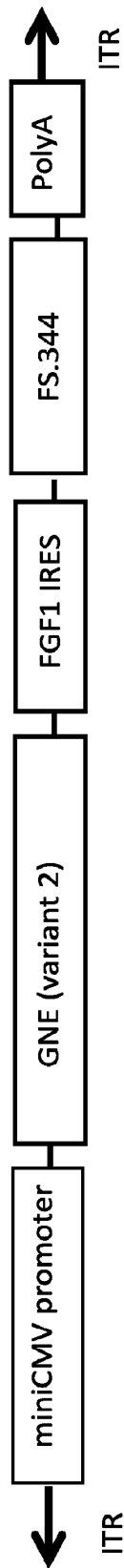


Figure 10

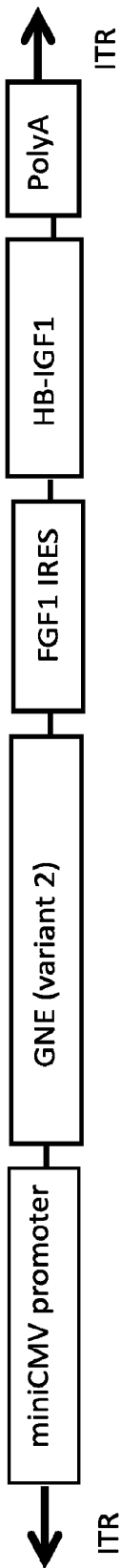


Figure 1P

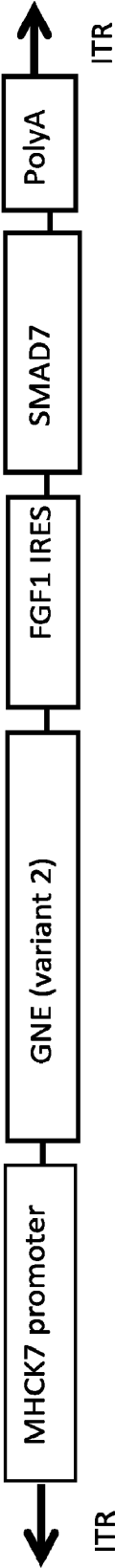


Figure 1Q

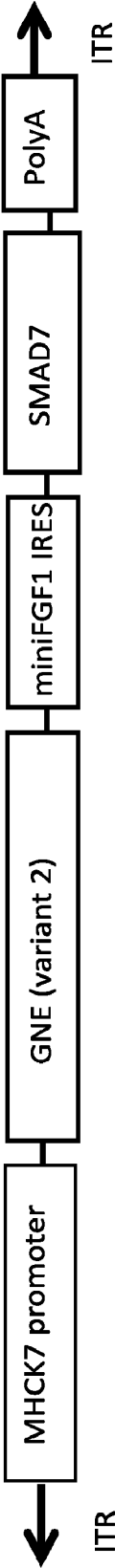


Figure 1R

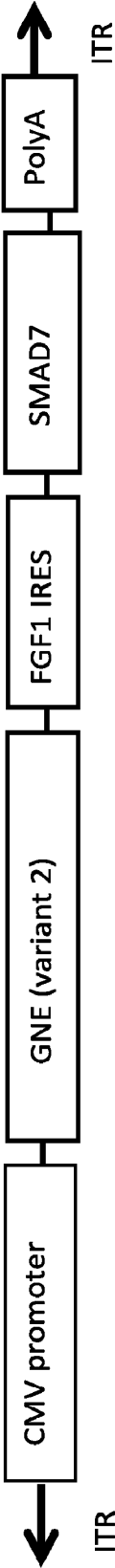


Figure 1S

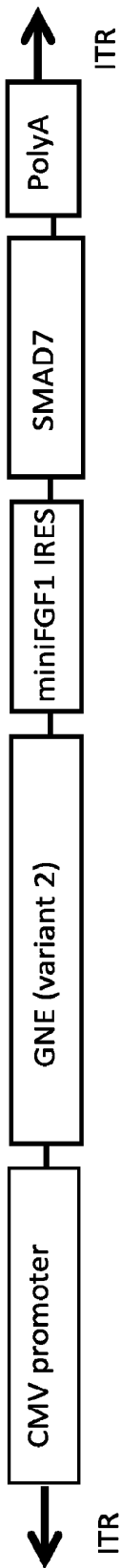


Figure 1T

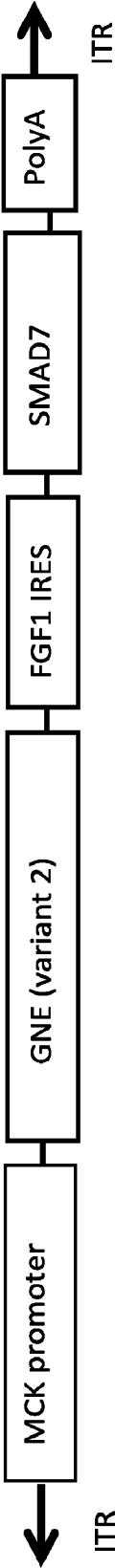


Figure 1U

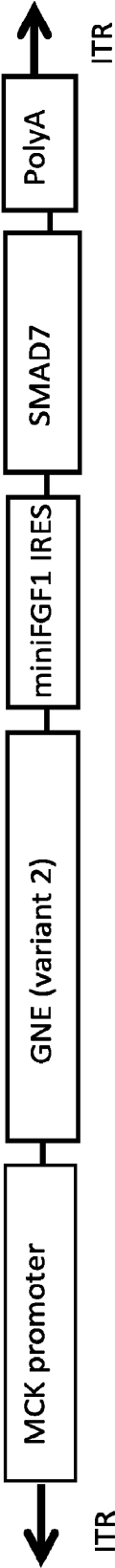


Figure 1V

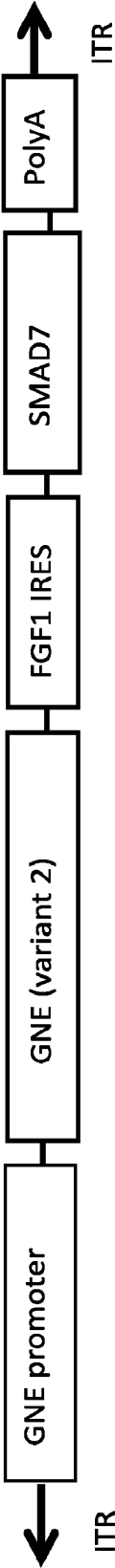


Figure 1W

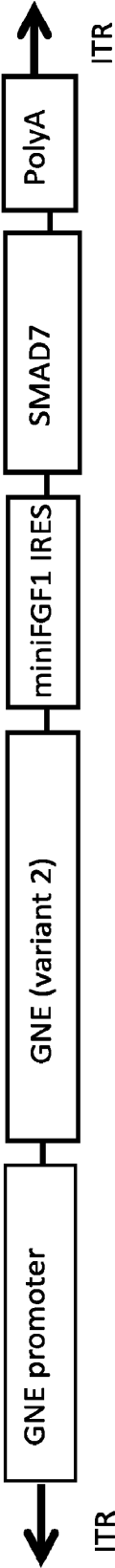


Figure 1X

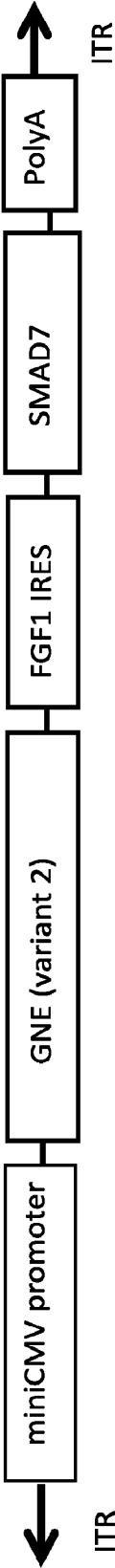


Figure 1Y

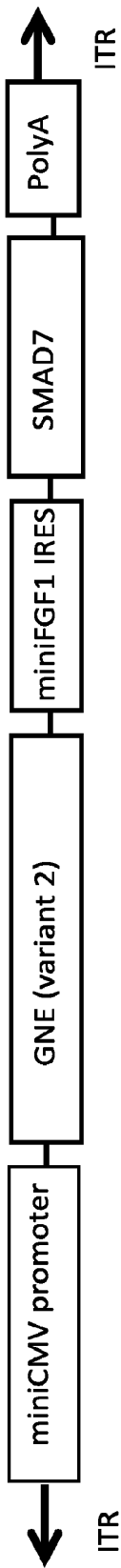


Figure 1Z

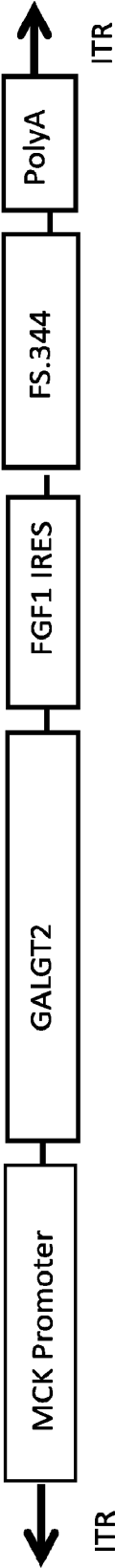


Figure 1AA

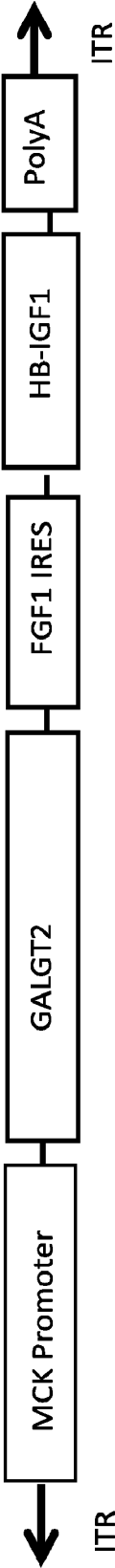


Figure 1BB

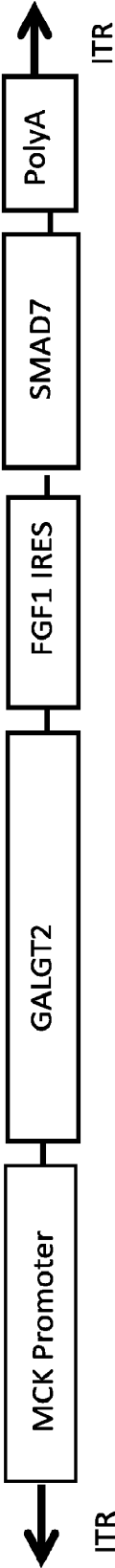


Figure 2A

pAAV.CMV.GNE KanR (7277 bp)

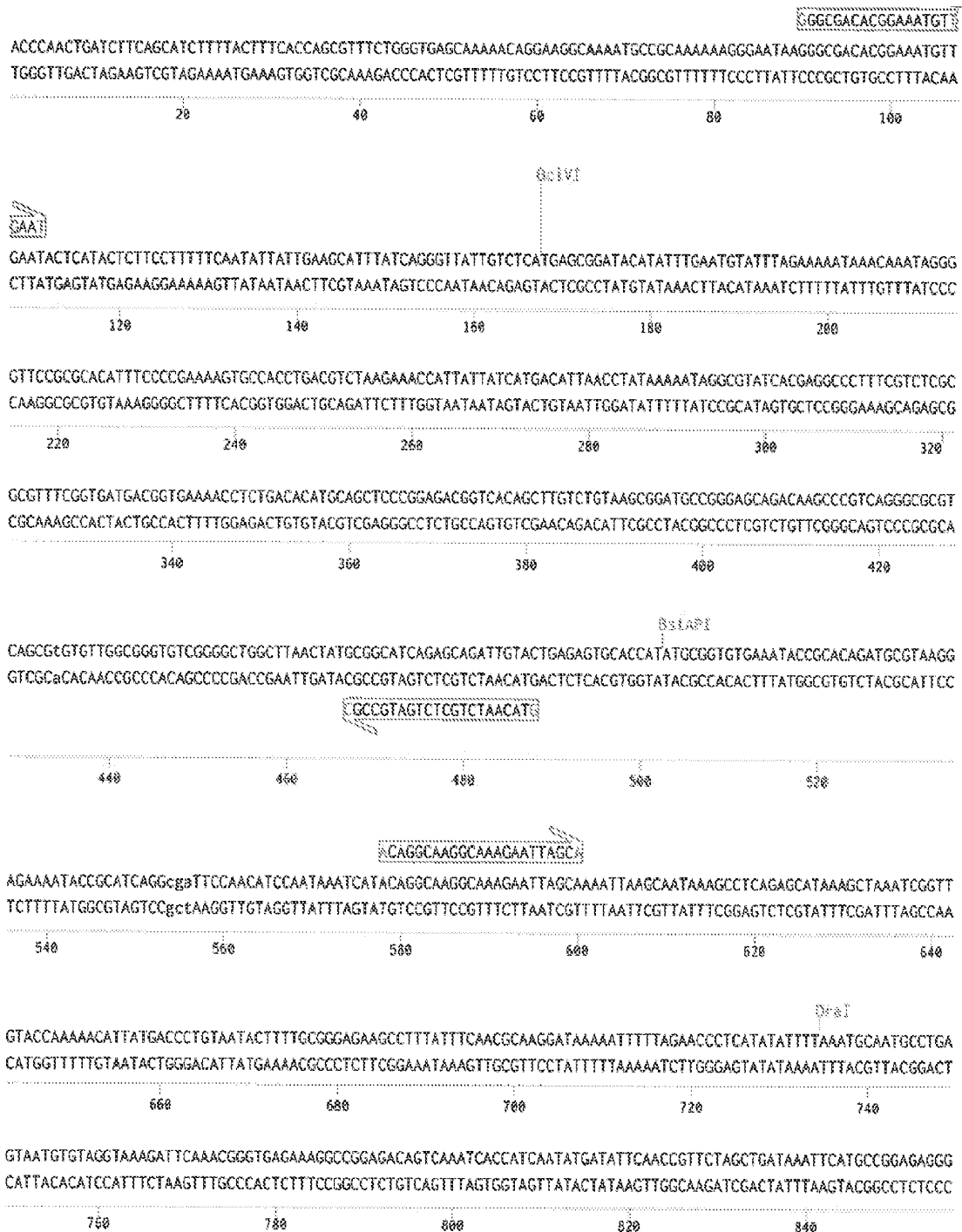


Figure 2B

pAAV.CMV.GNE KanR (7277 bp) (from 857-1605 bp)

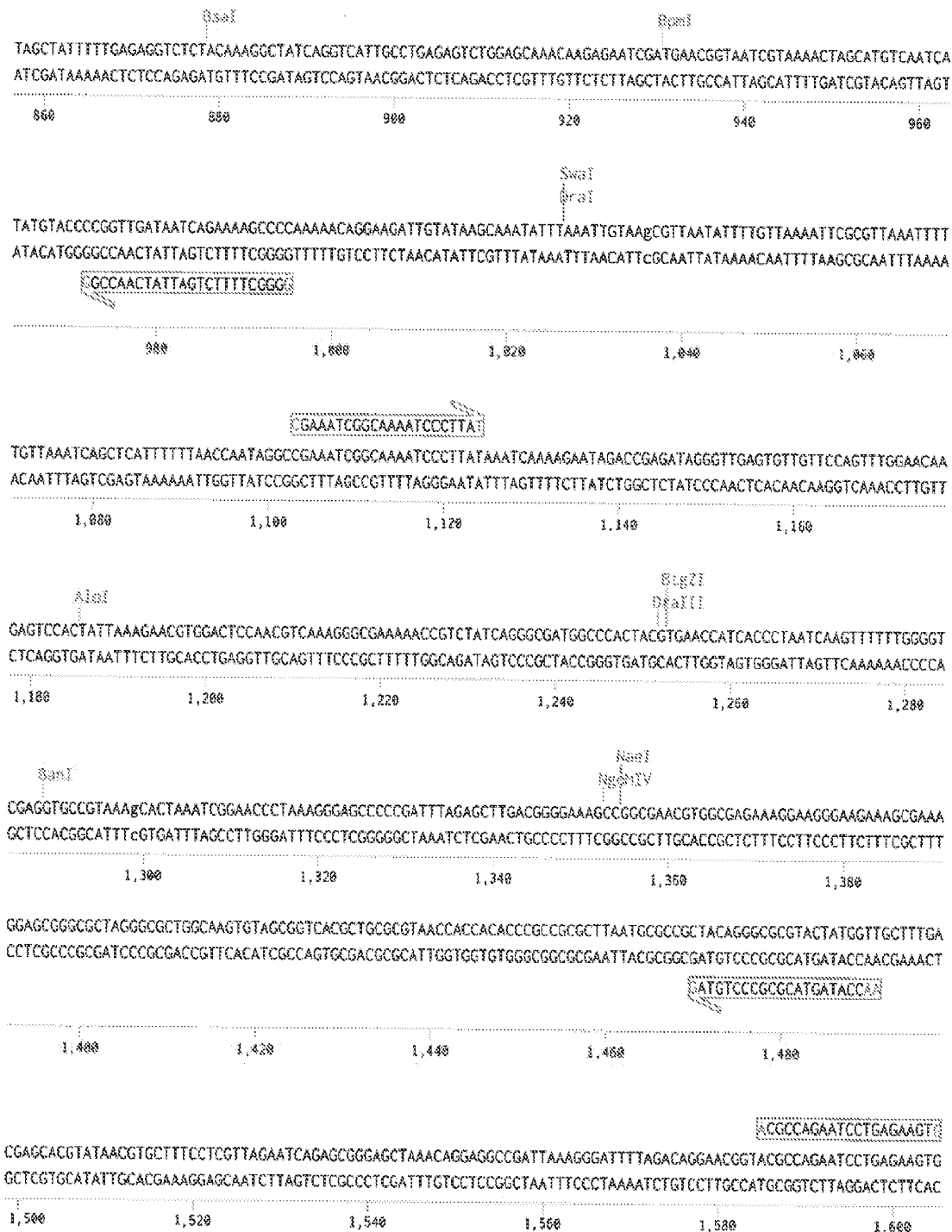


Figure 2C

pAAV.CMV.GNE KanR (7277 bp) (from 1606-2354 bp)

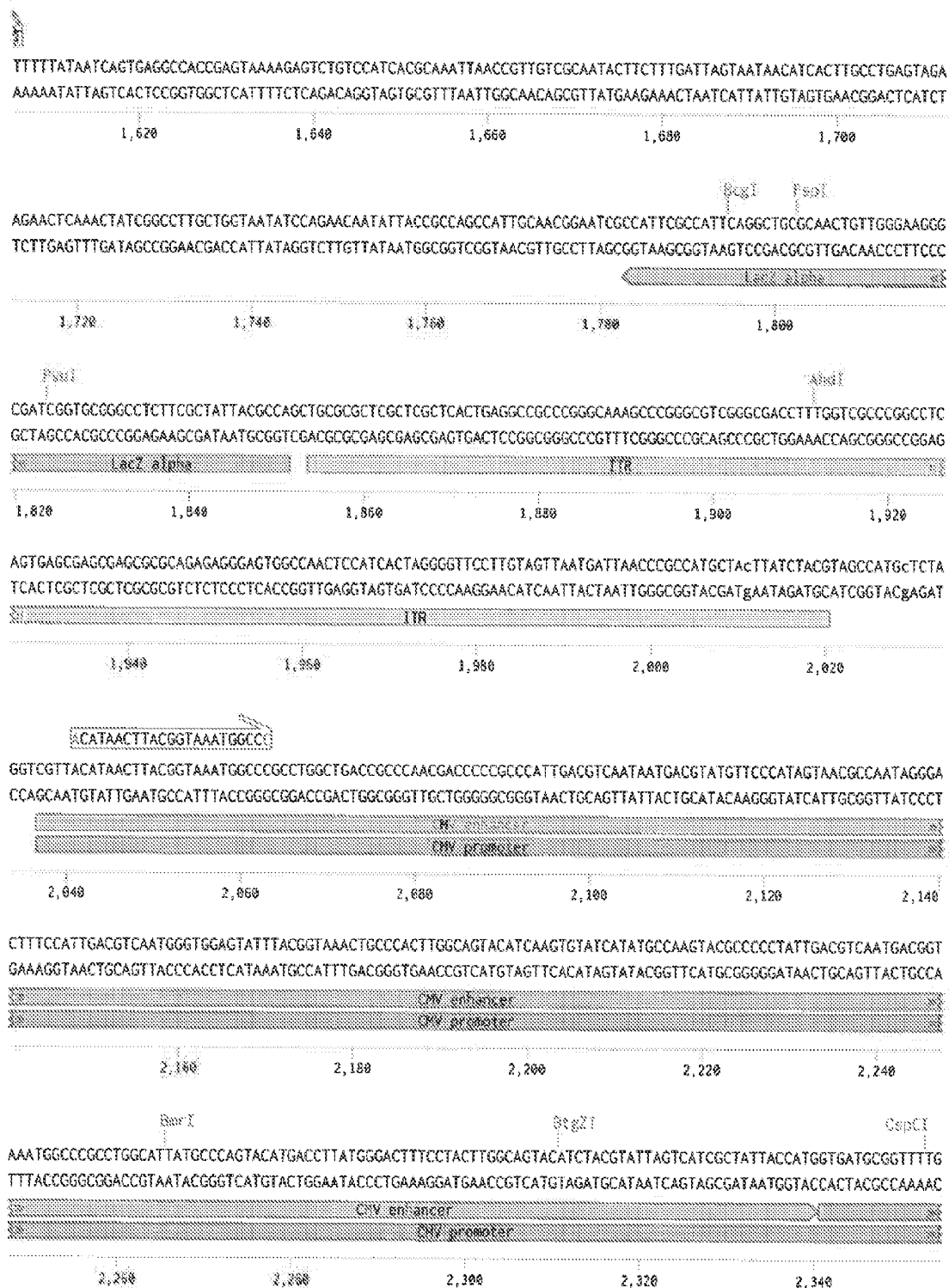


Figure 2D

pAAV.CMV.GNE KanR (7277 bp) (from 2355-2782 bp)

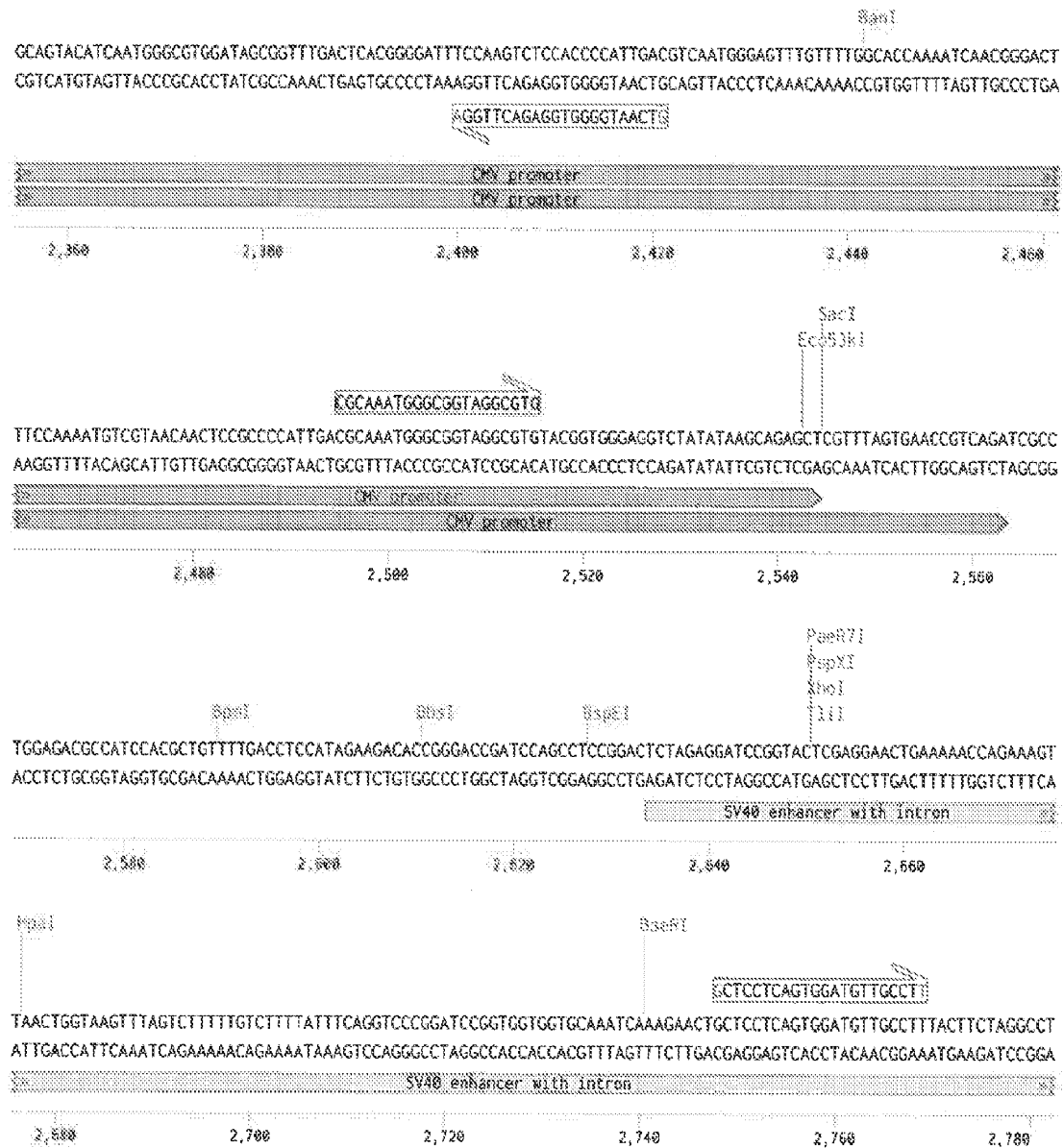


Figure 2E

pAAV.CMV.GNE KanR (7277 bp) (from 2783-3210 bp)

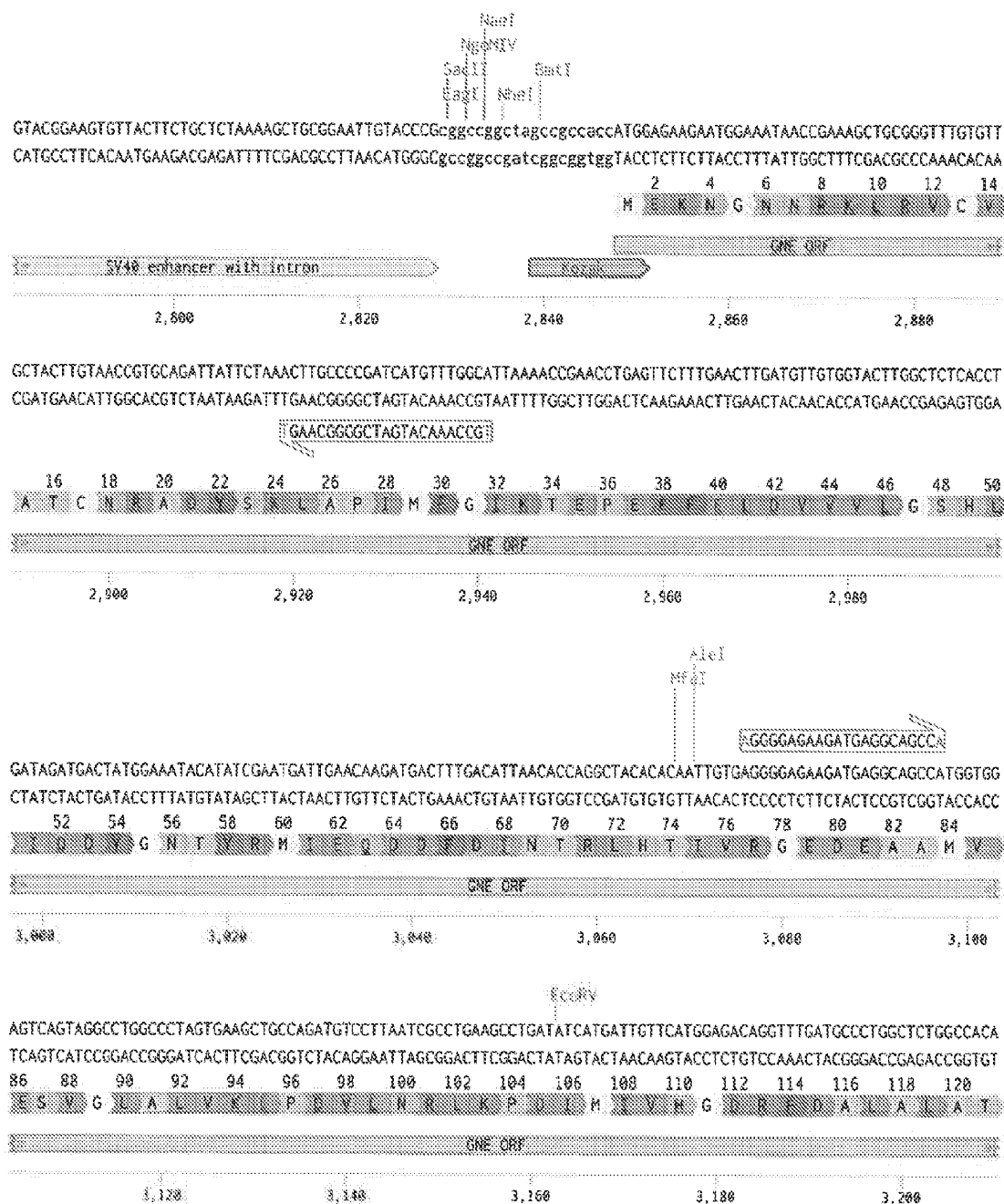


Figure 2F

pAAV.CMV.GNE KanR (7277 bp) (from 3211-3745 bp)

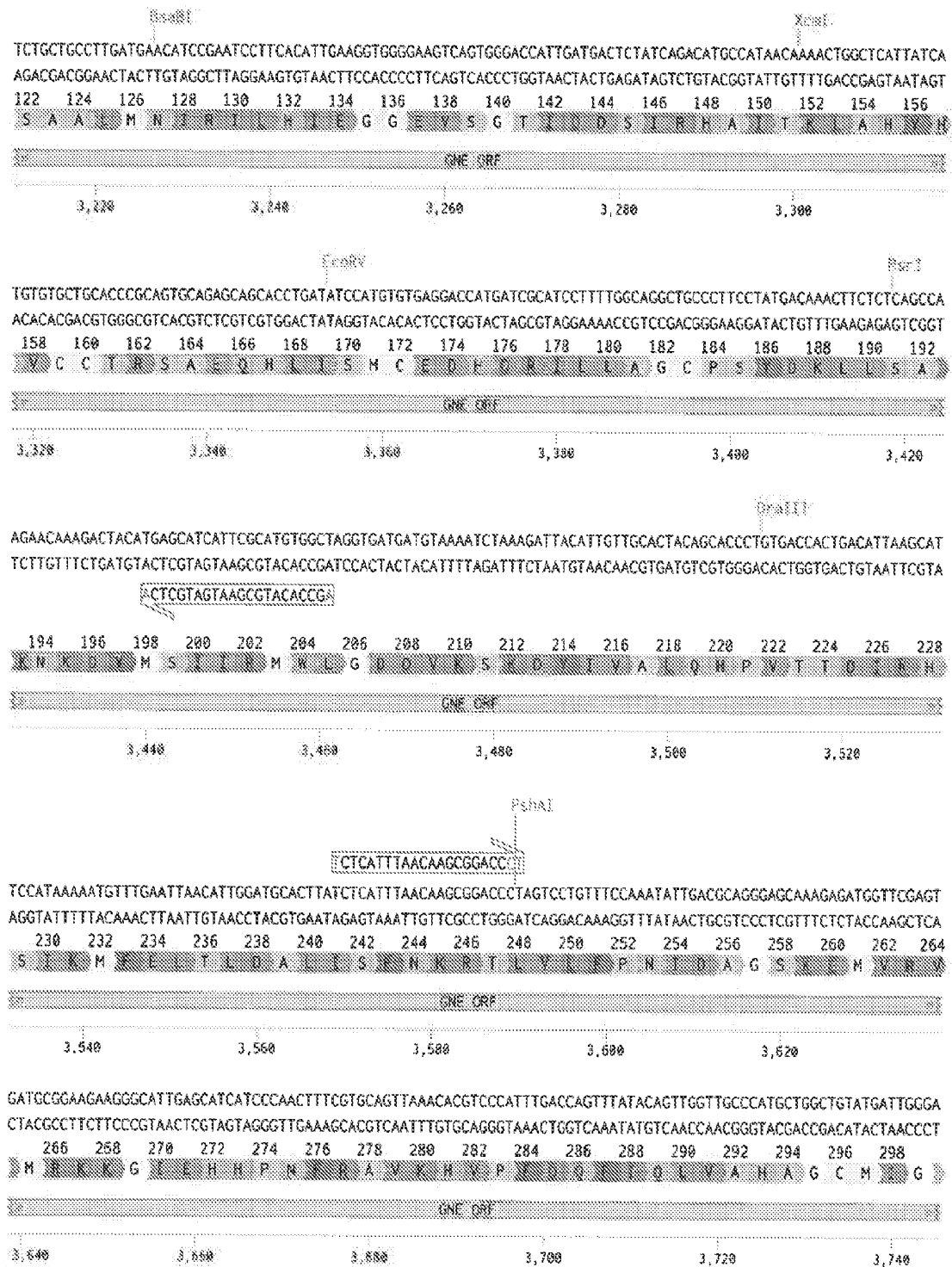


Figure 2G

pAAV.CMV.GNE KanR (7277 bp) (from 3746-4280 bp)

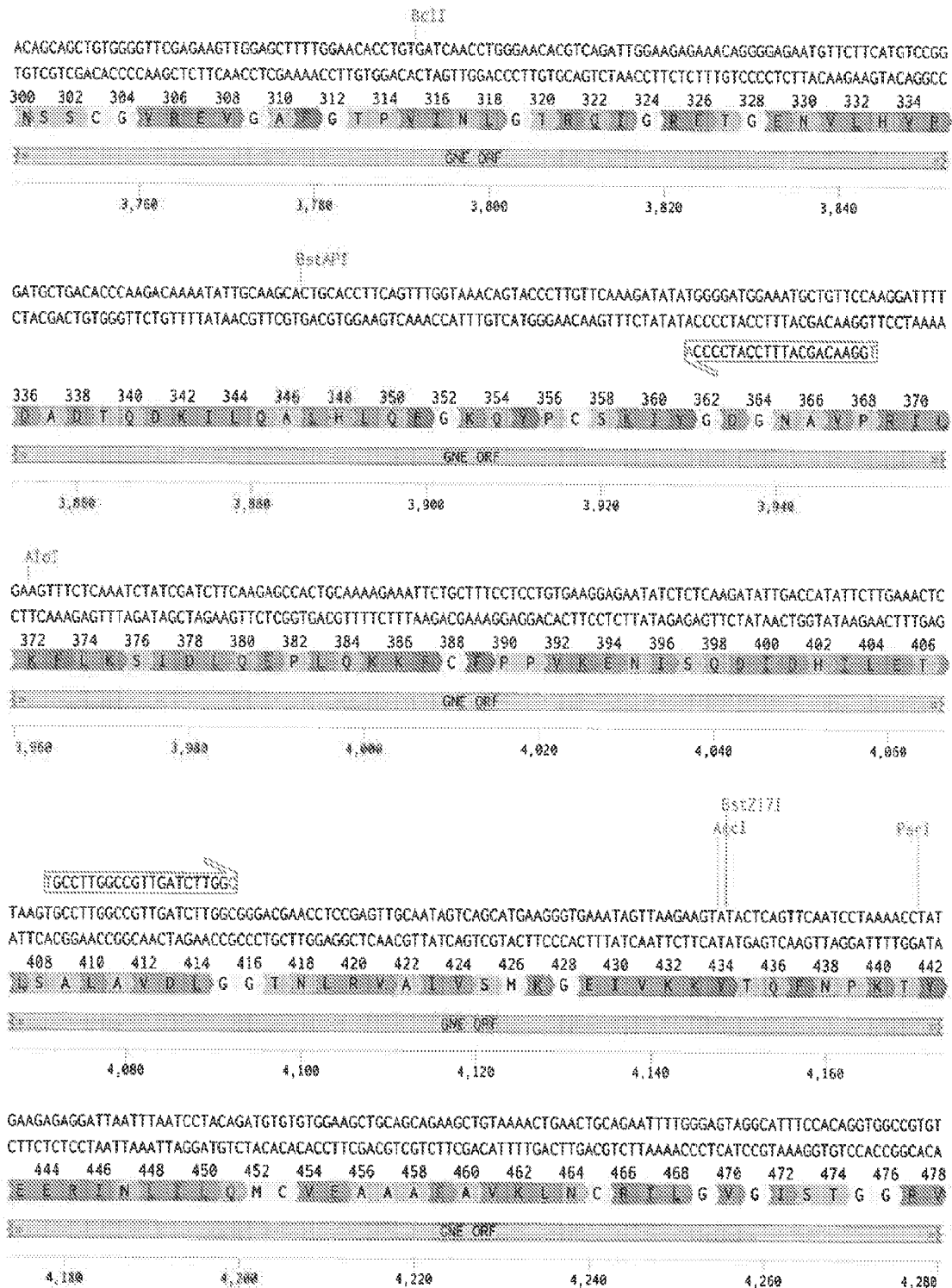


Figure 2H

pAAV.CMV.GNE KanR (7277 bp) (from 4281-4815 bp)

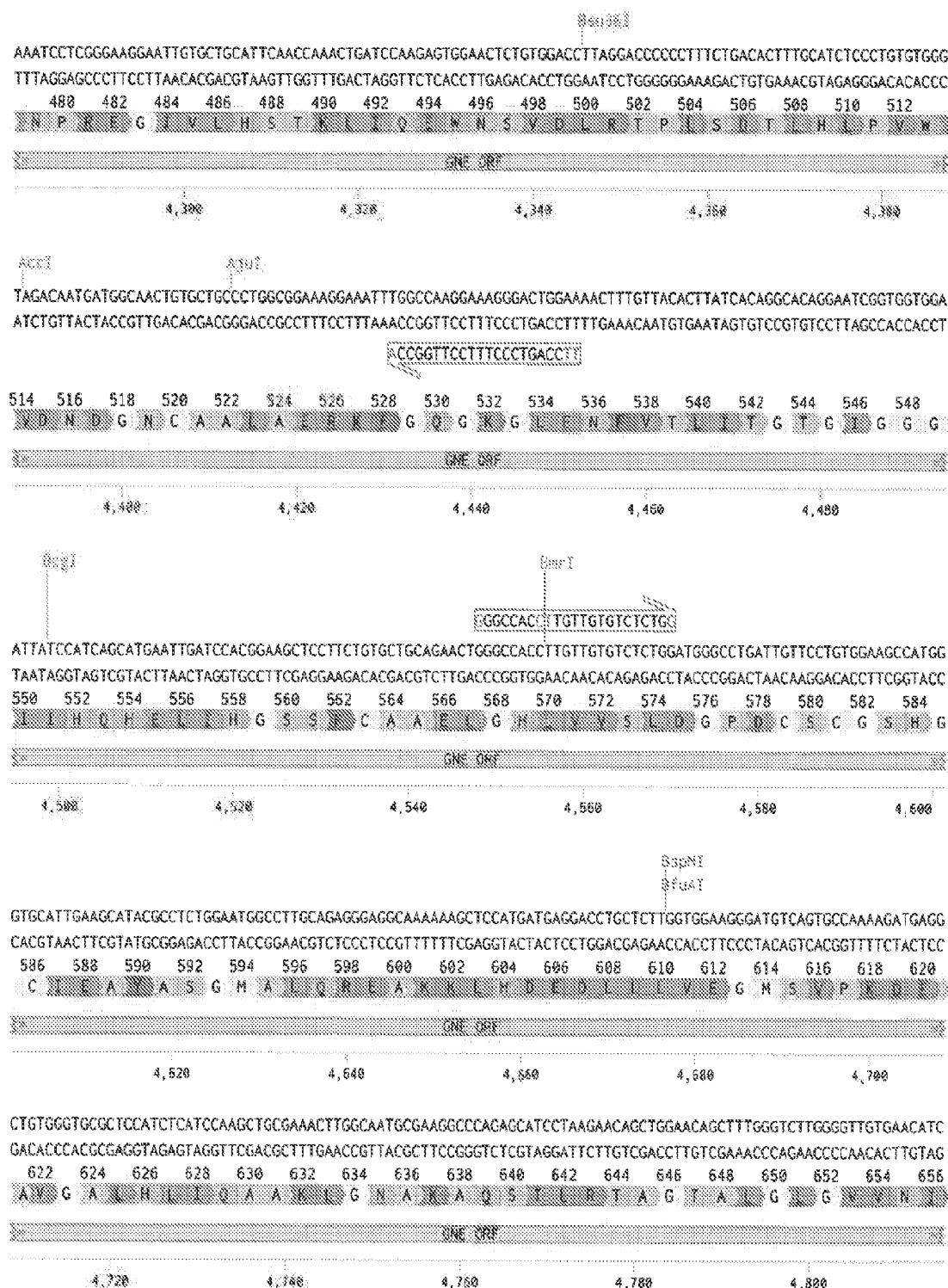


Figure 21

pAAV.CMV.GNE KanR (7277 bp) (from 4816-5350 bp)

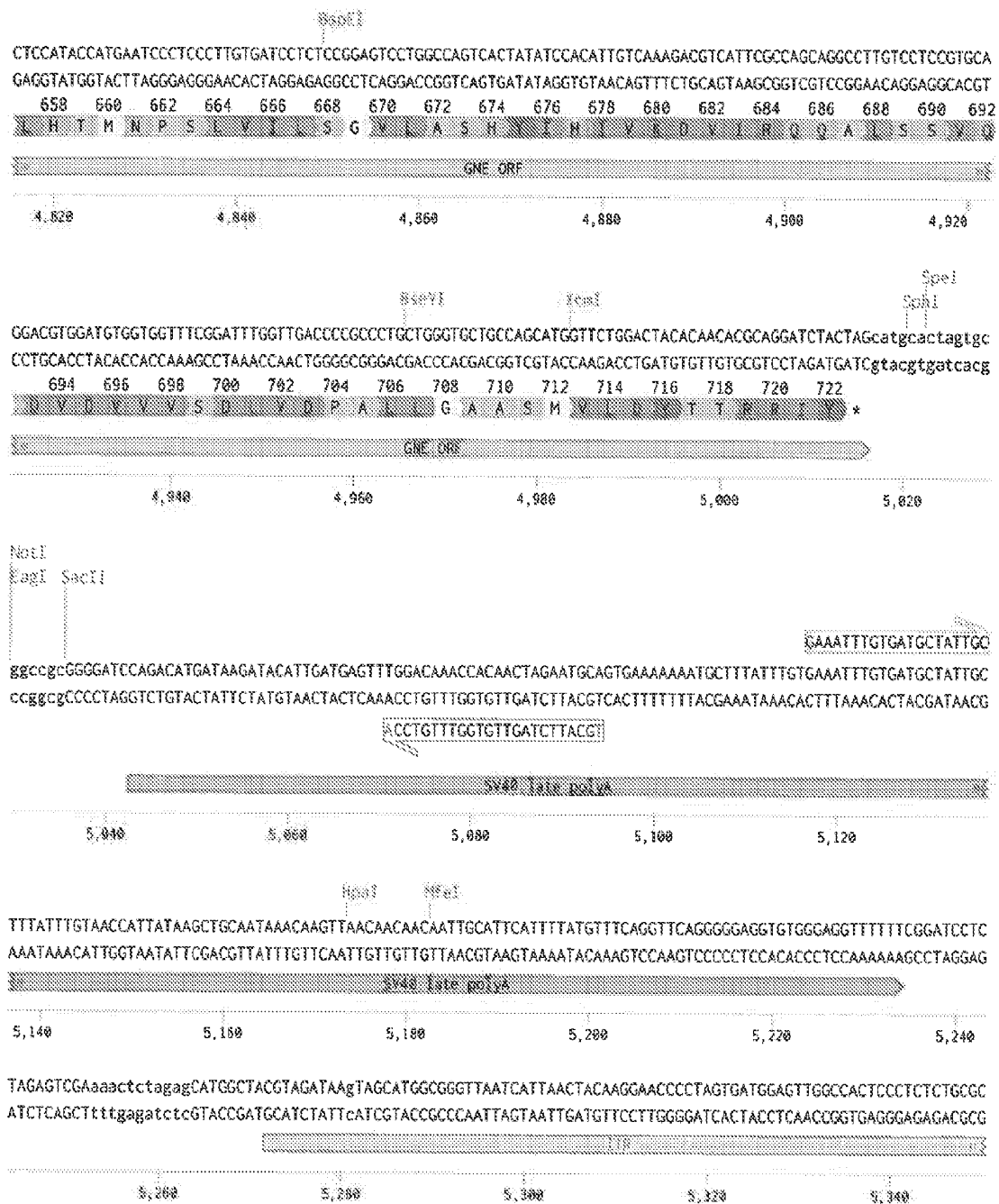


Figure 2J

pAAV.CMV.GNE KanR (7277 bp) (from 5351-5992 bp)

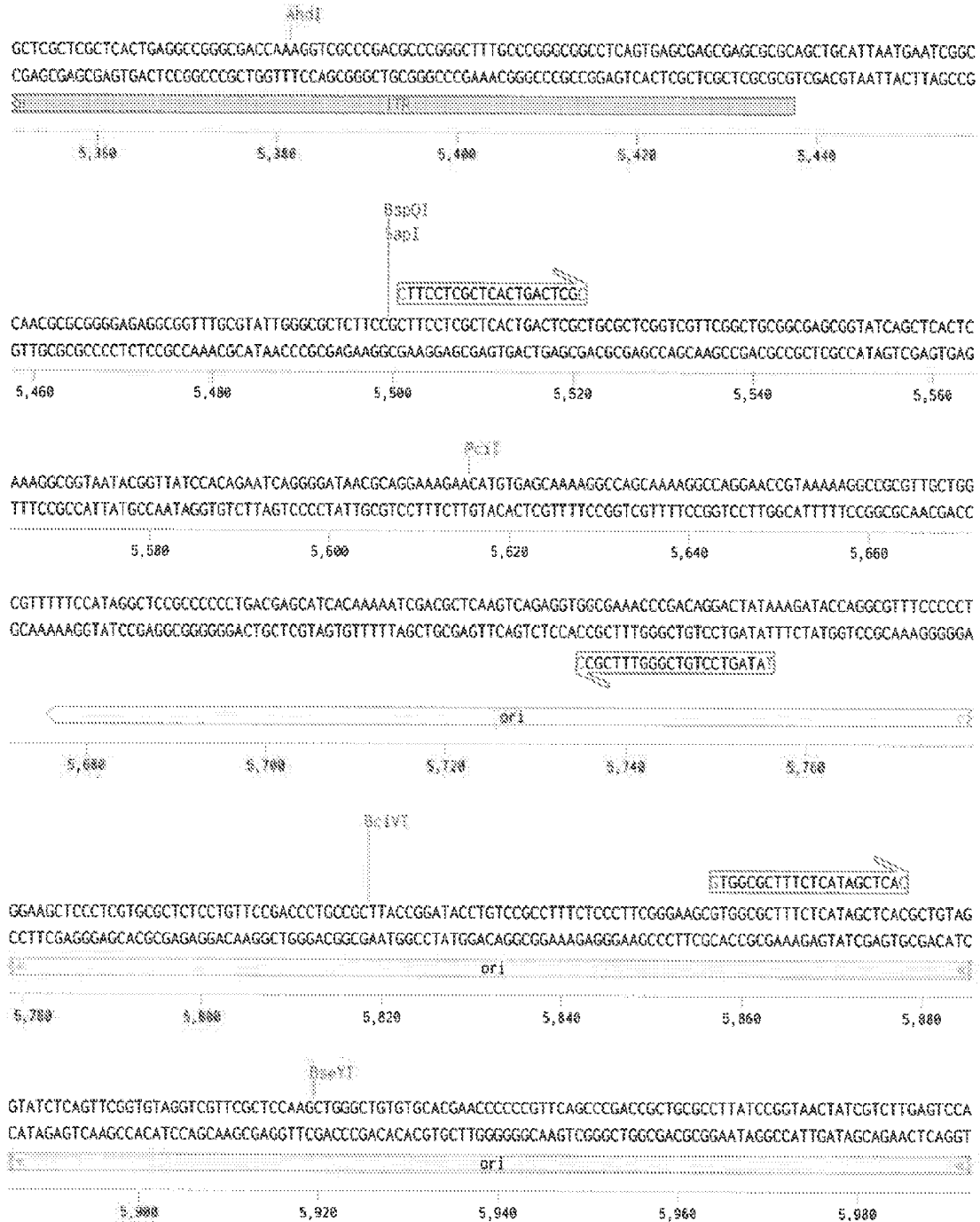


Figure 2K

pAAV.CMV.GNE KanR (7277 bp) (from 5993-6741 bp)

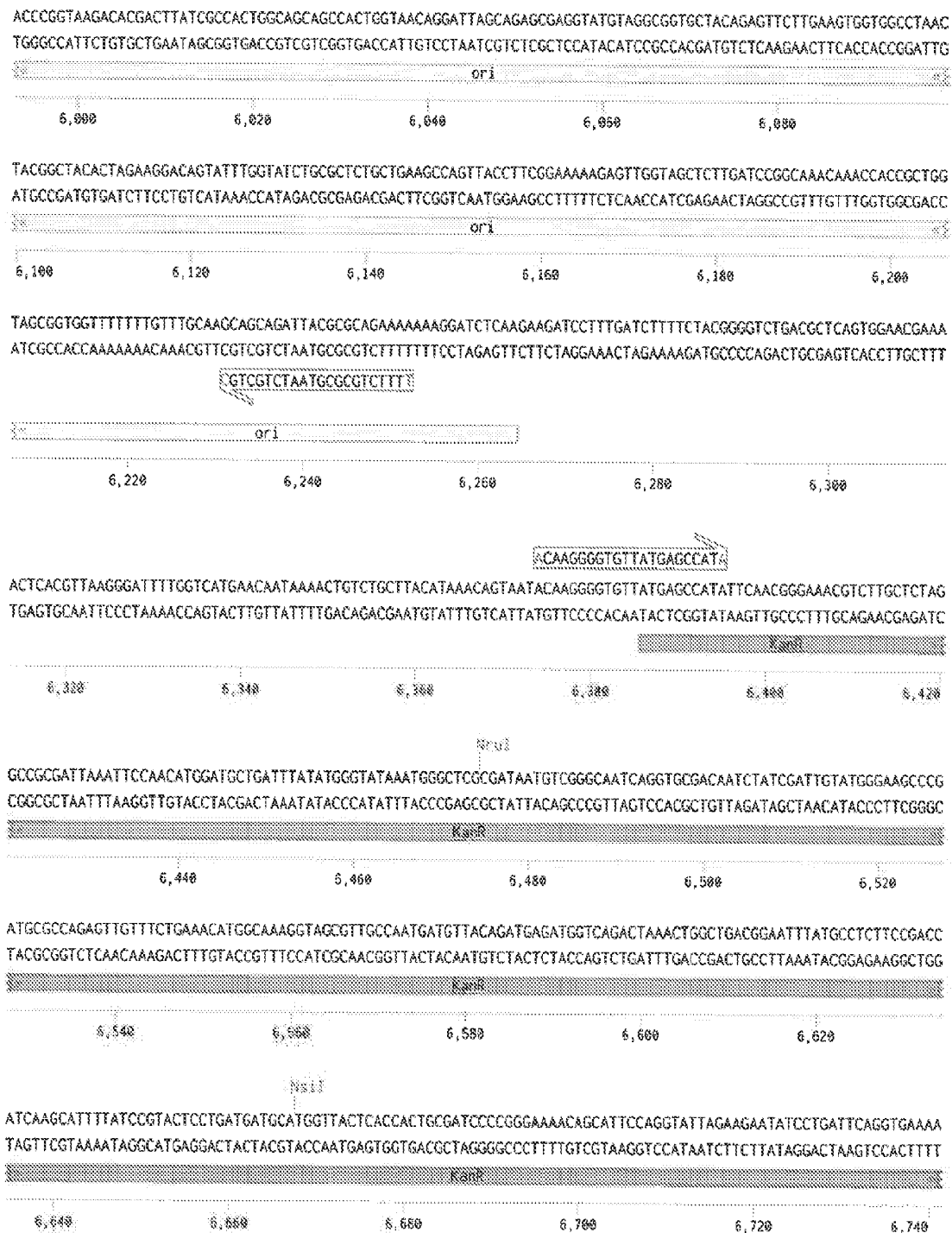


Figure 2L

pAAV.CMV.GNE KanR (7277 bp) (from 6742-7277 bp)

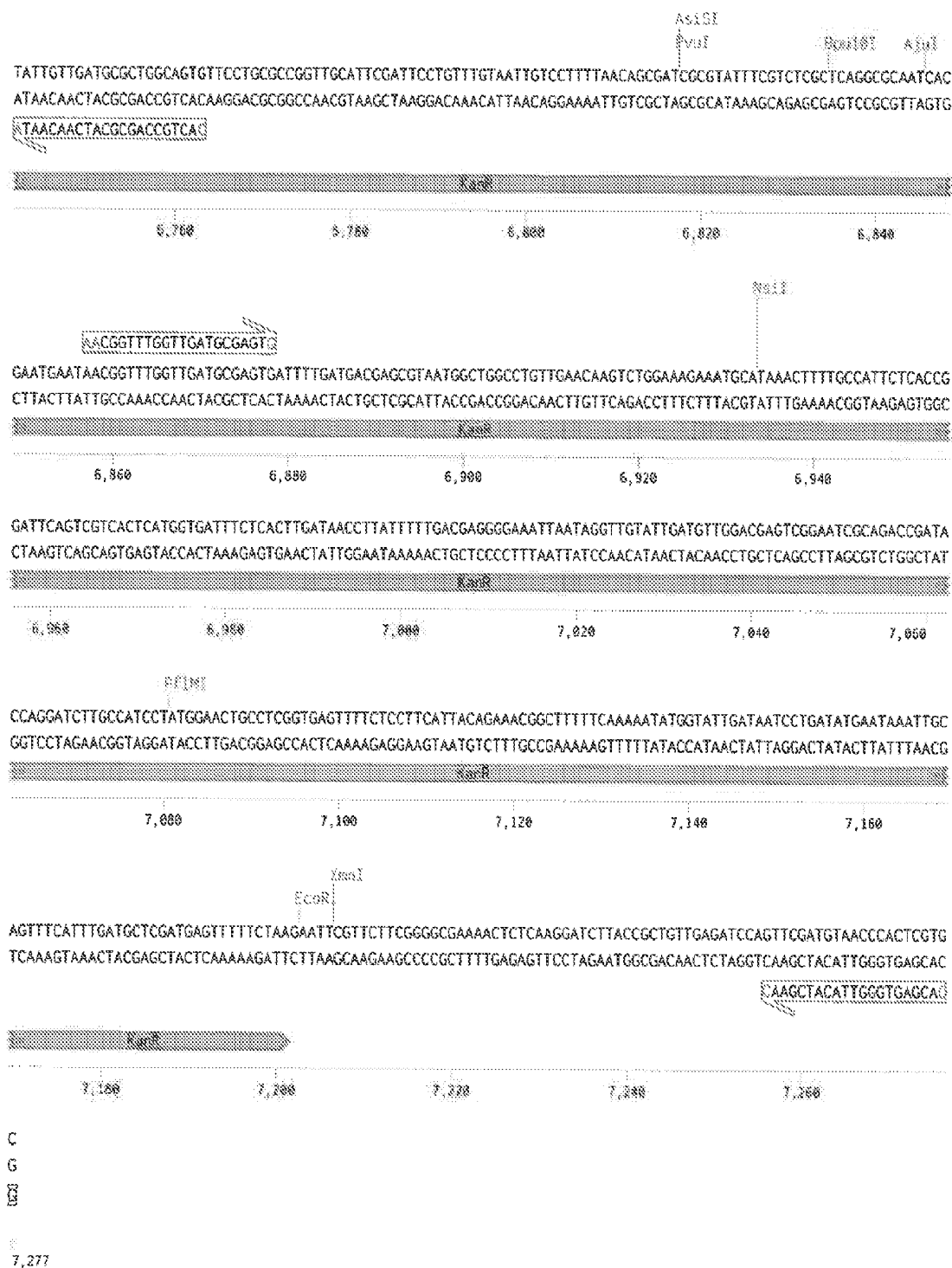


Figure 3A

(from 1-535 bp)

pAAV.MCK.GNE KanR (7070 bp)

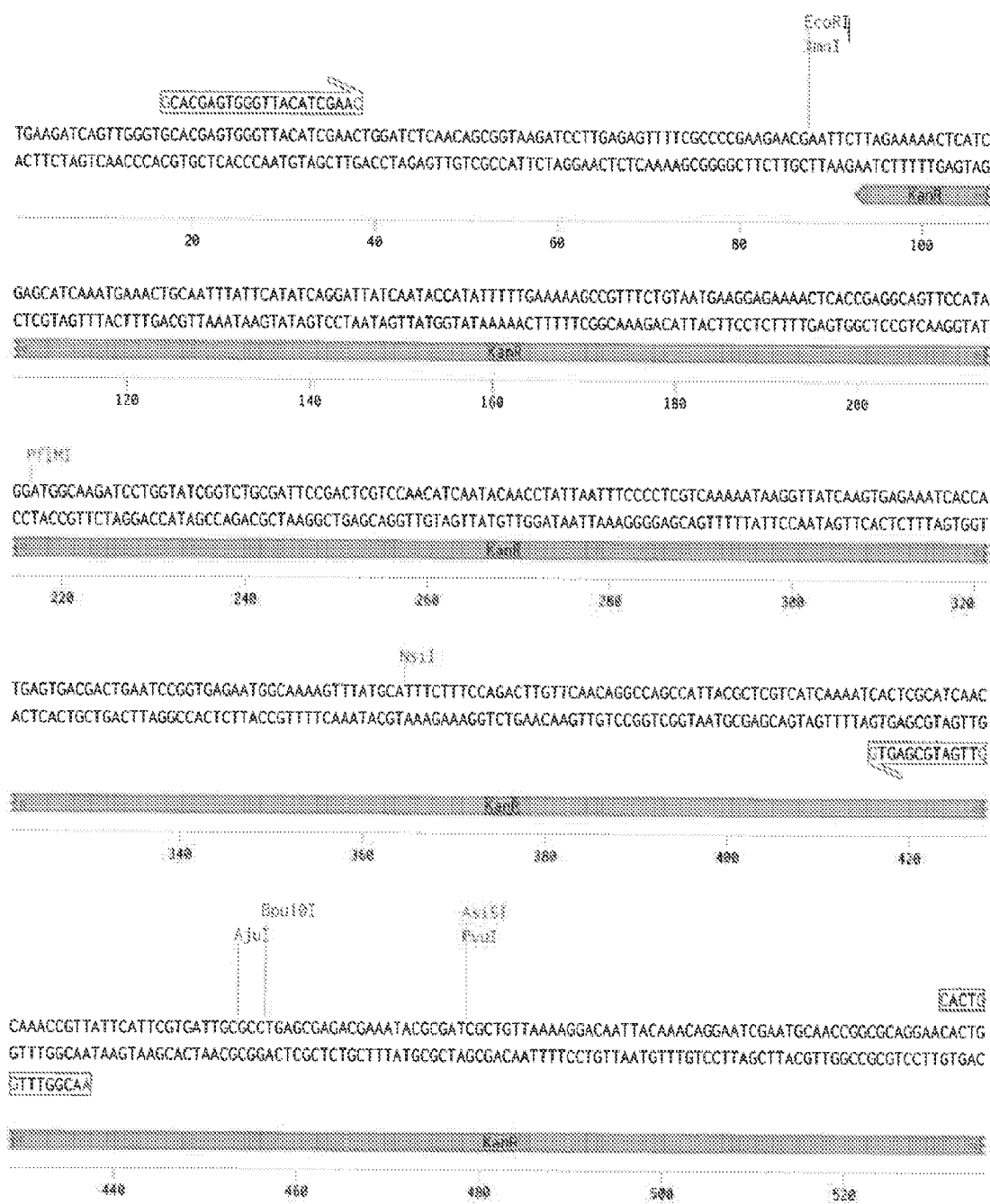


Figure 3B

pAAV.MCK.GNE KanR (7070 bp) (from 536-1284 bp)

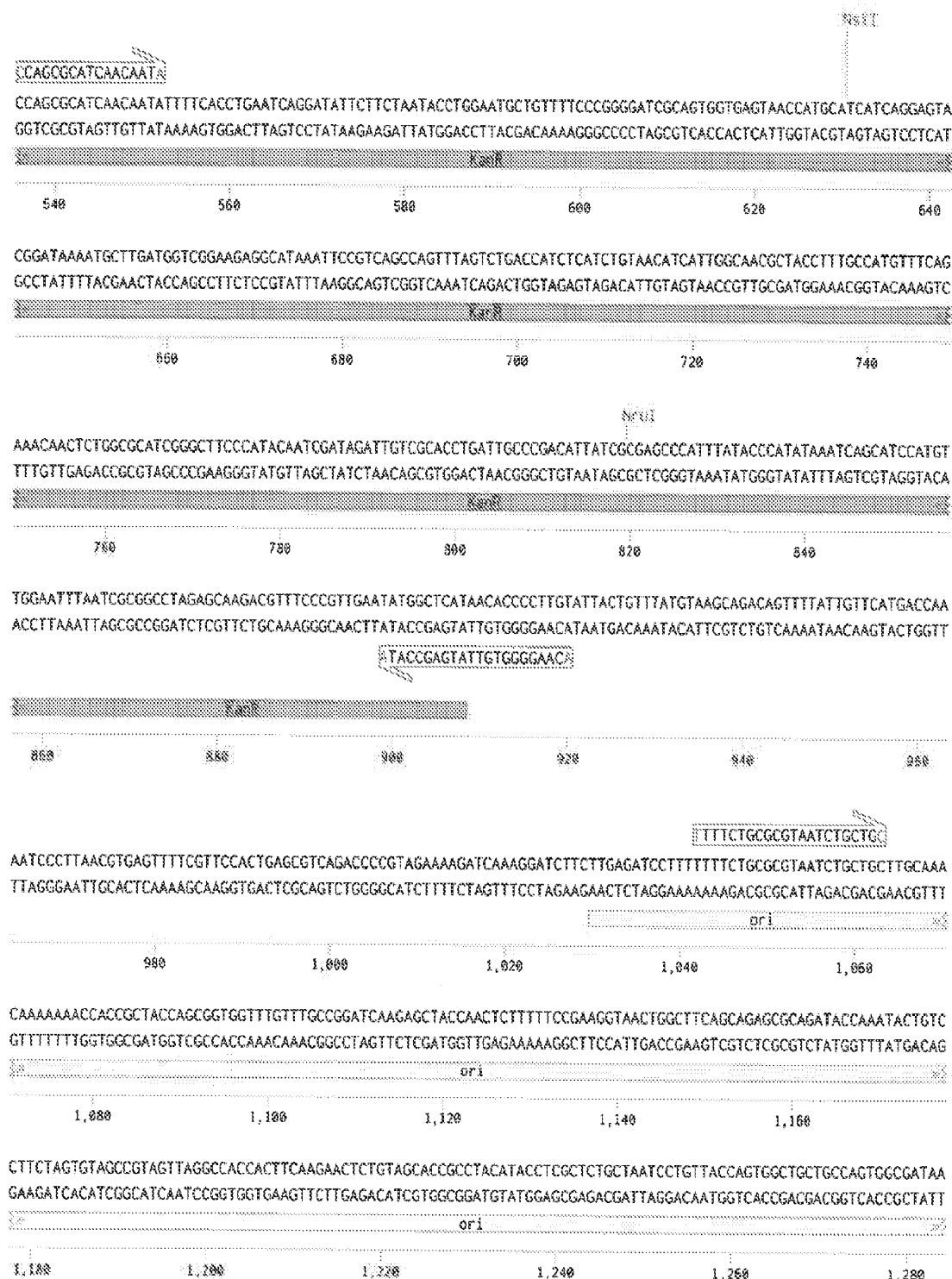


Figure 3C

pAAV.MCK.GNE KanR (7070 bp) (from 1285-1926 bp)

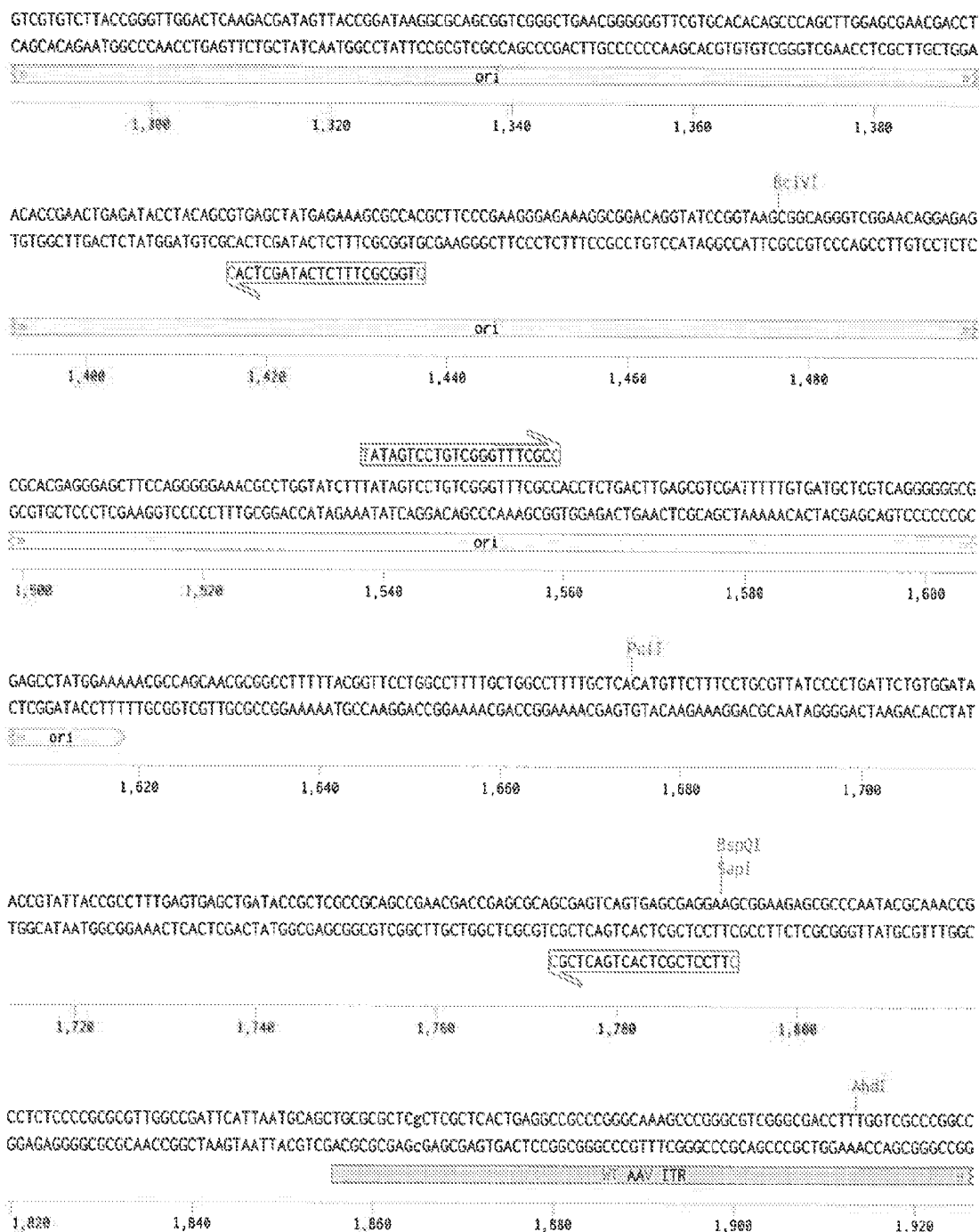


Figure 3D

pAAV.MCK.GNE KanR (7070 bp) (from 1927-2568 bp)

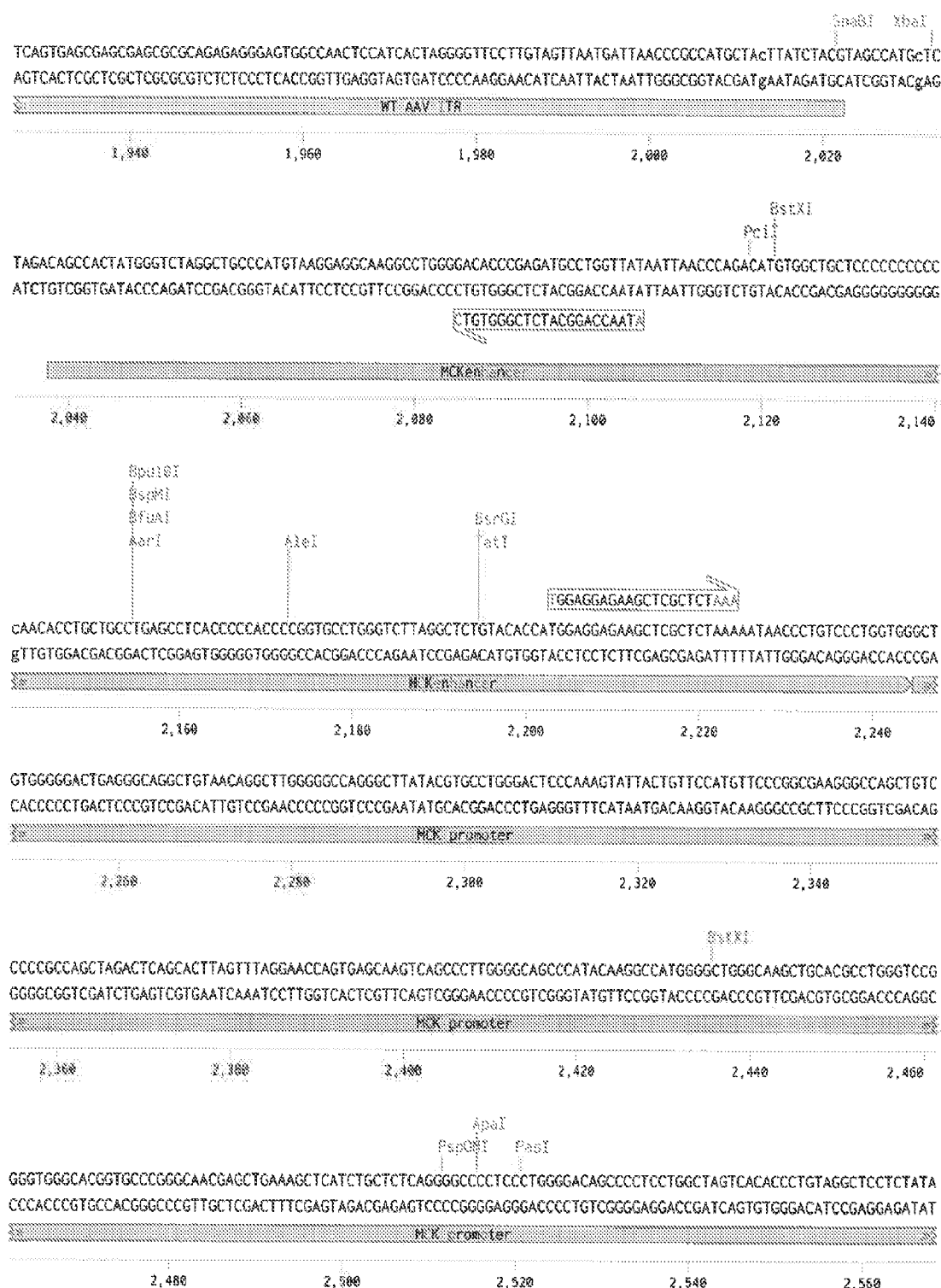


Figure 3E

pAAV.MCK.GNE KanR (7070 bp) (from 2569-3103 bp)

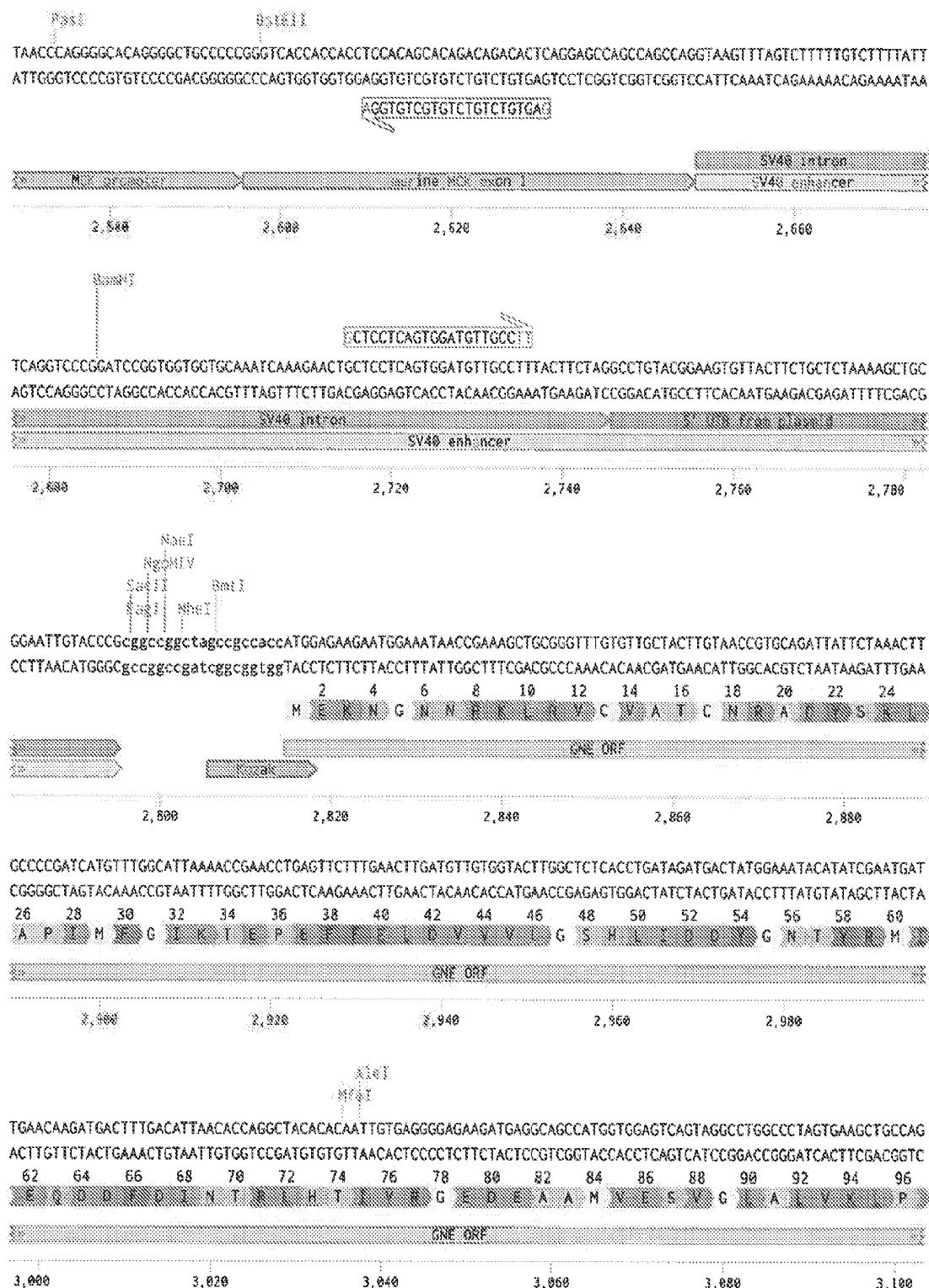


Figure 3F

pAAV.MCK.GNE KanR (7070 bp) (from 3104-3638 bp)

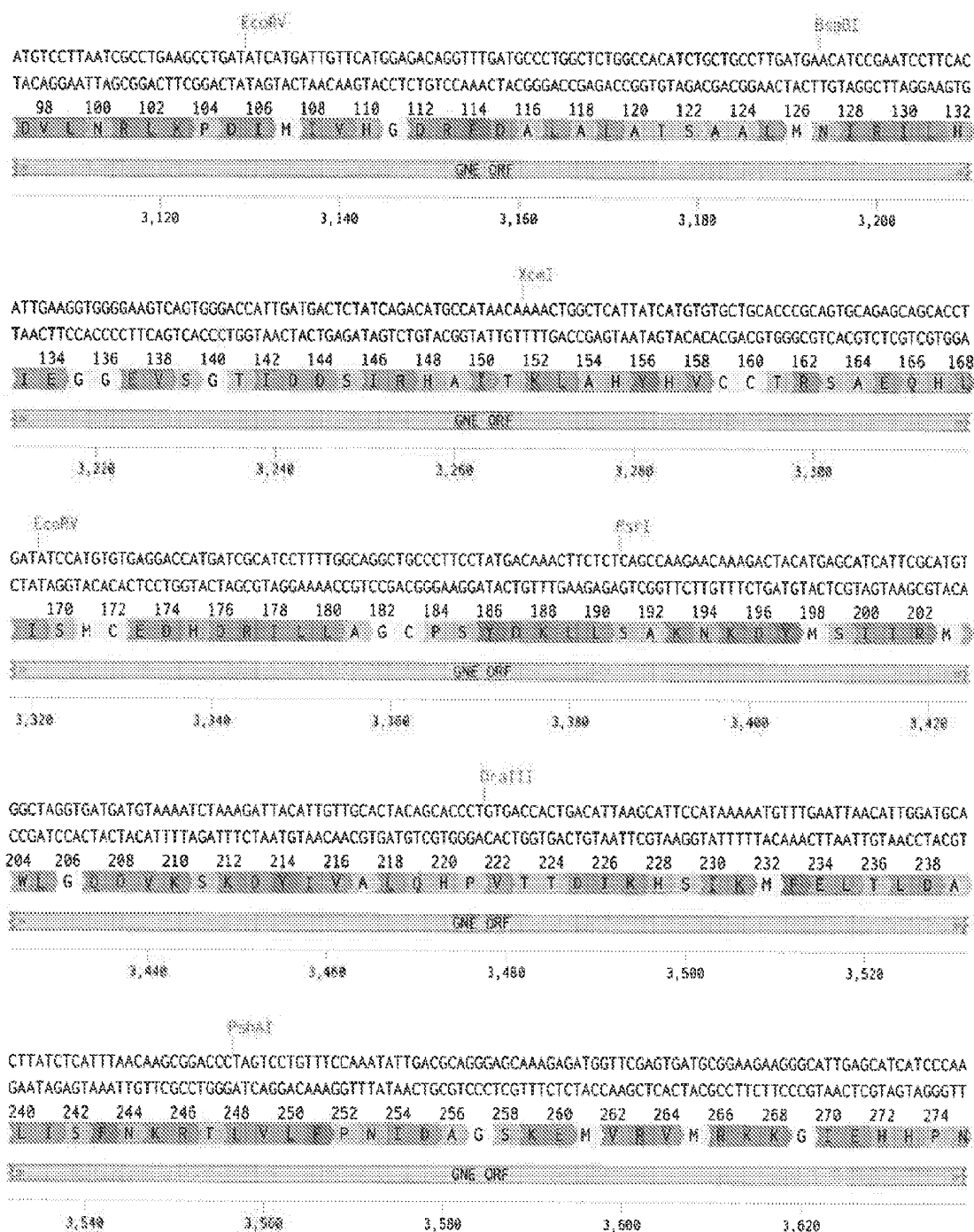


Figure 3G

pAAV.MCK.GNE KanR (7070 bp) (from 3639-4173 bp)

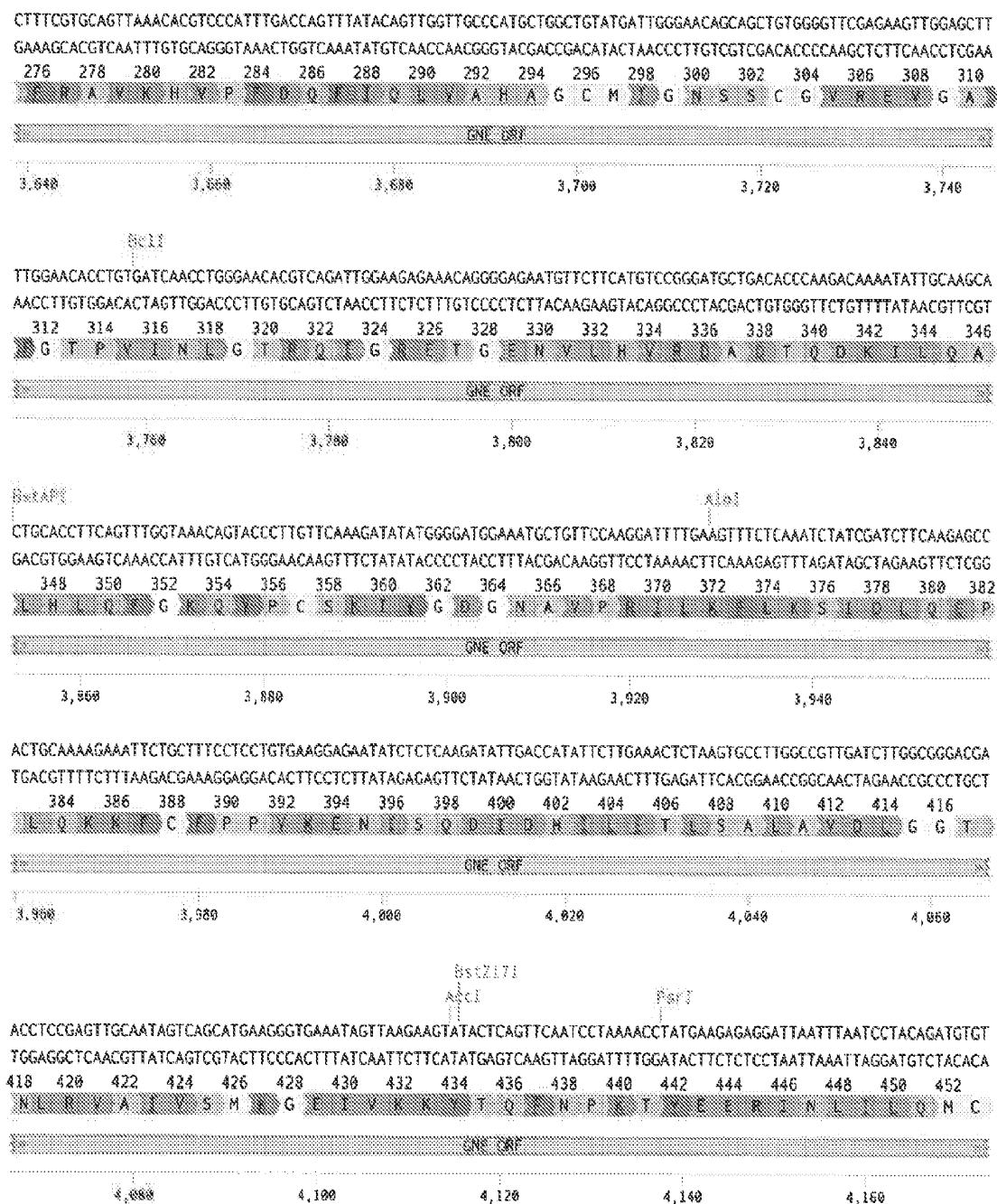


Figure 3H

pAAV.MCK.GNE KanR (7070 bp) (from 4174-4708 bp)

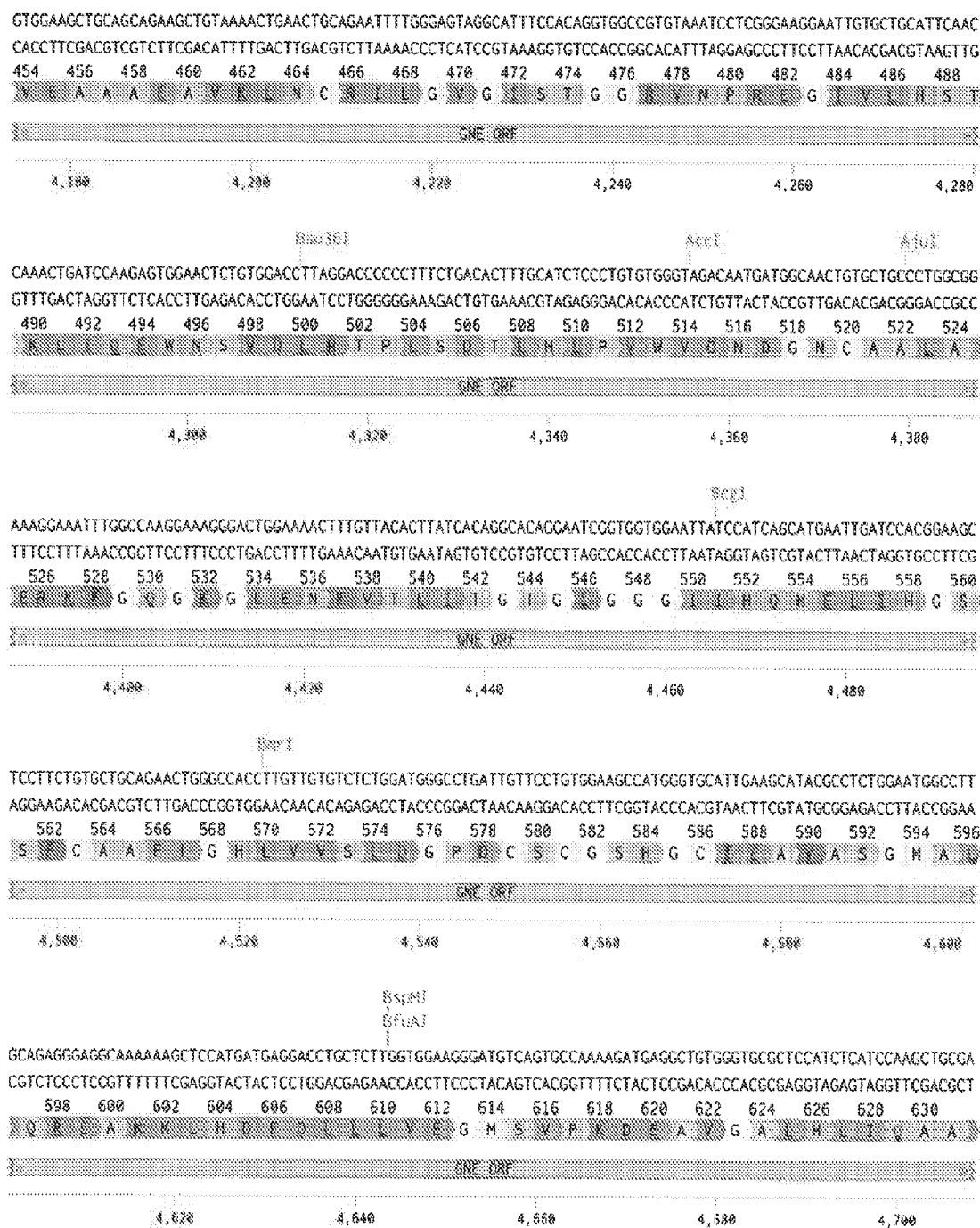


Figure 3I

pAAV.MCK.GNE KanR (7070 bp) (from 4709-5350 bp)

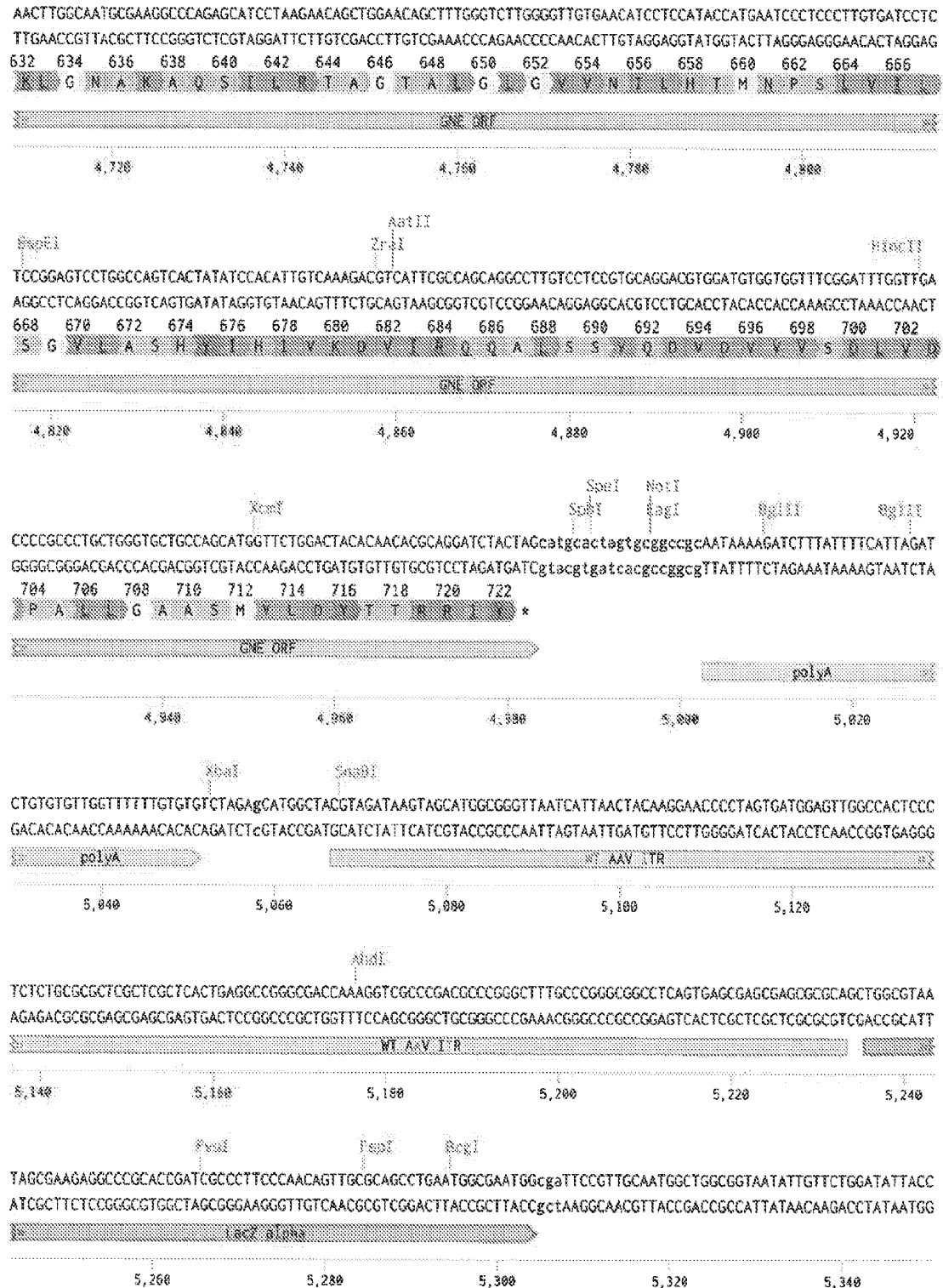


Figure 3J

pAAV.MCK.GNE KanR (7070 bp) (from 5351-5992 bp)

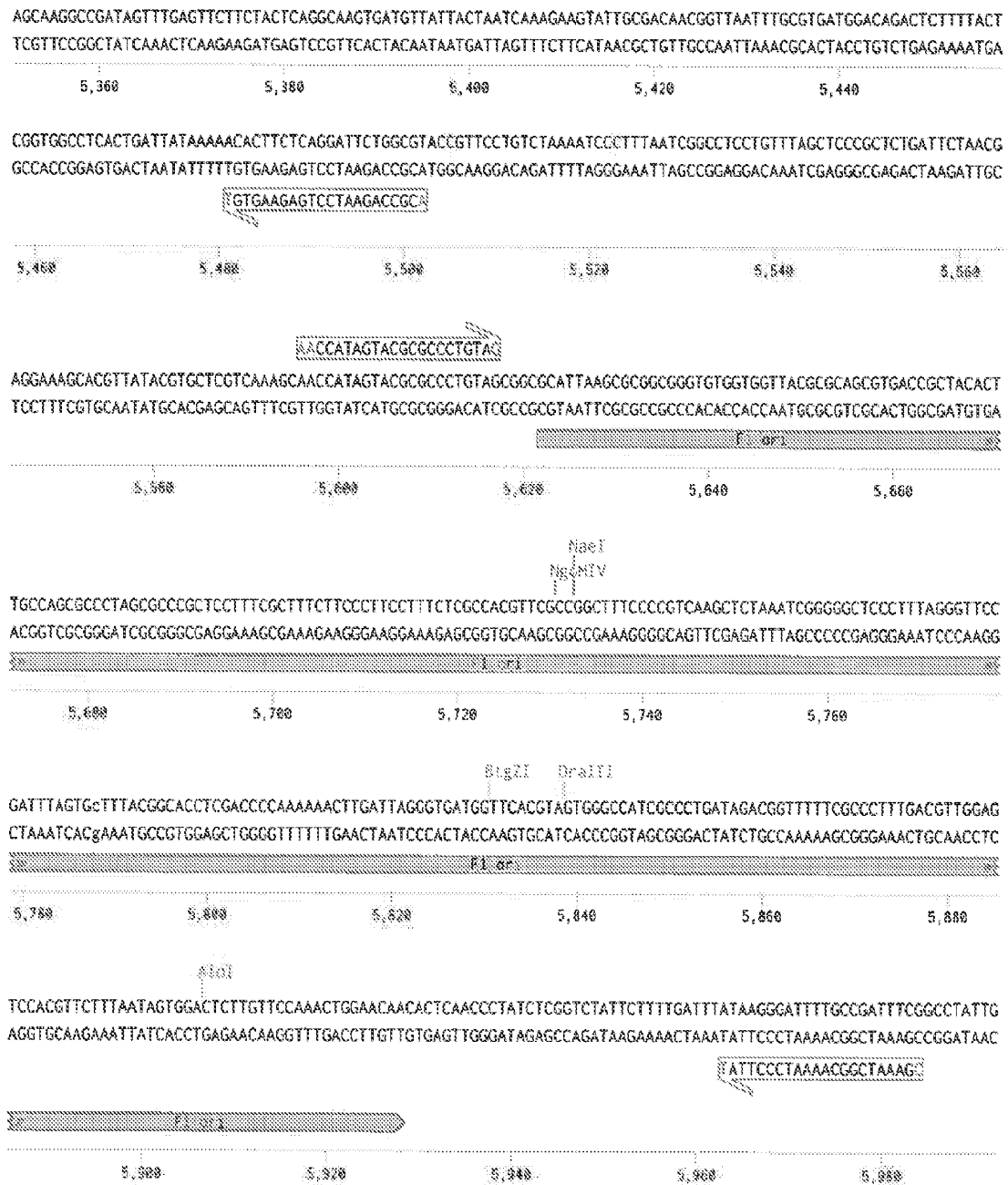


Figure 3K

pAAV.MCK.GNE KanR (7070 bp) (from 5993-6741 bp)

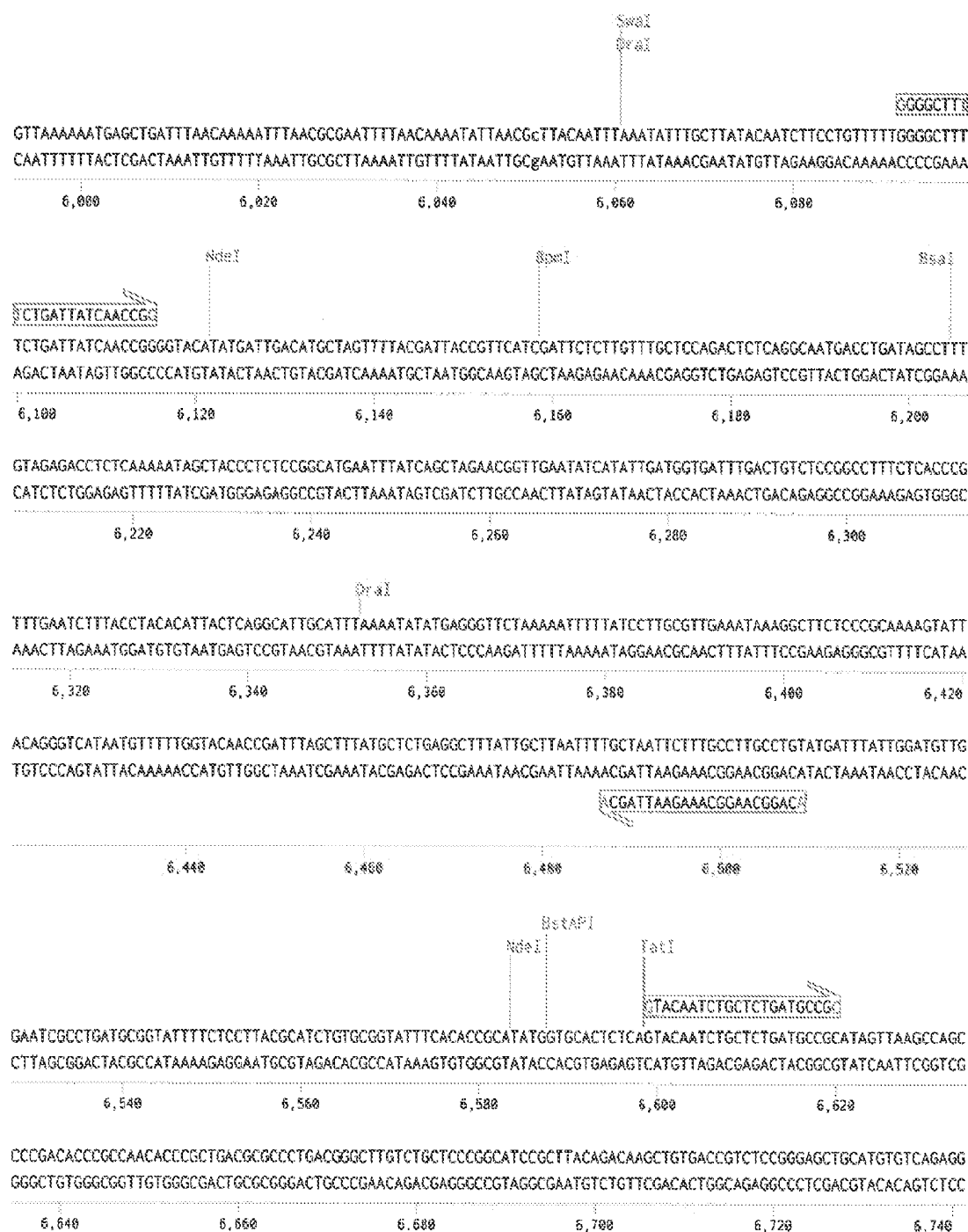


Figure 3L

pAAV.MCK.GNE KanR (7070 bp) (from 6742-7070 bp)

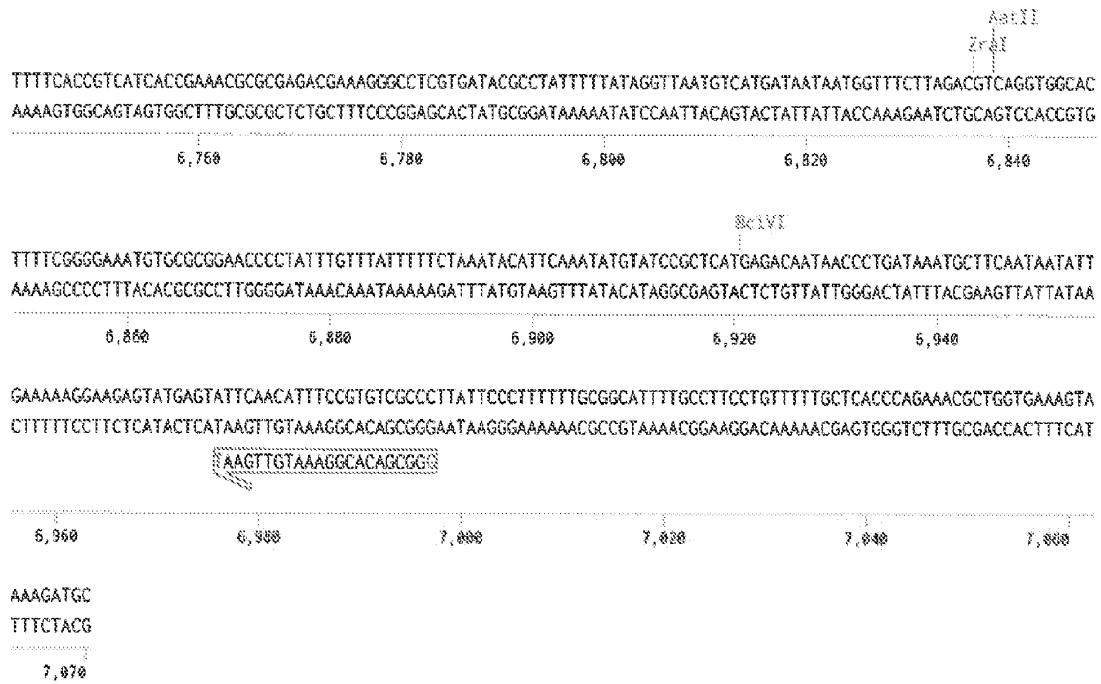


Figure 4A

(from 1-555 bp)

pAAV.MHCK7.GNE KanR (7270 bp)

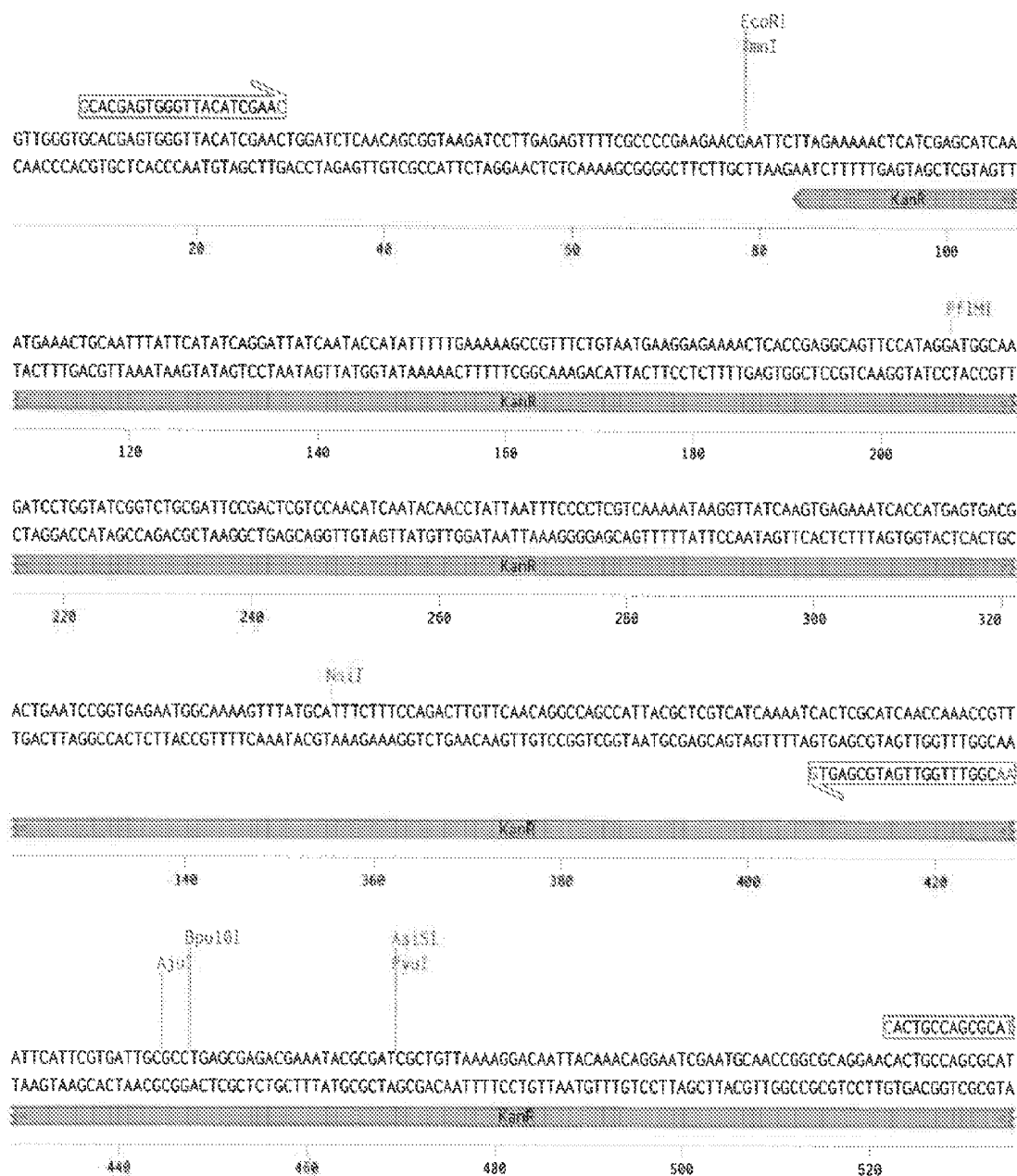


Figure 4B

pAAV.MHCK7.GNE KanR (7270 bp) (from 536-1284 bp)

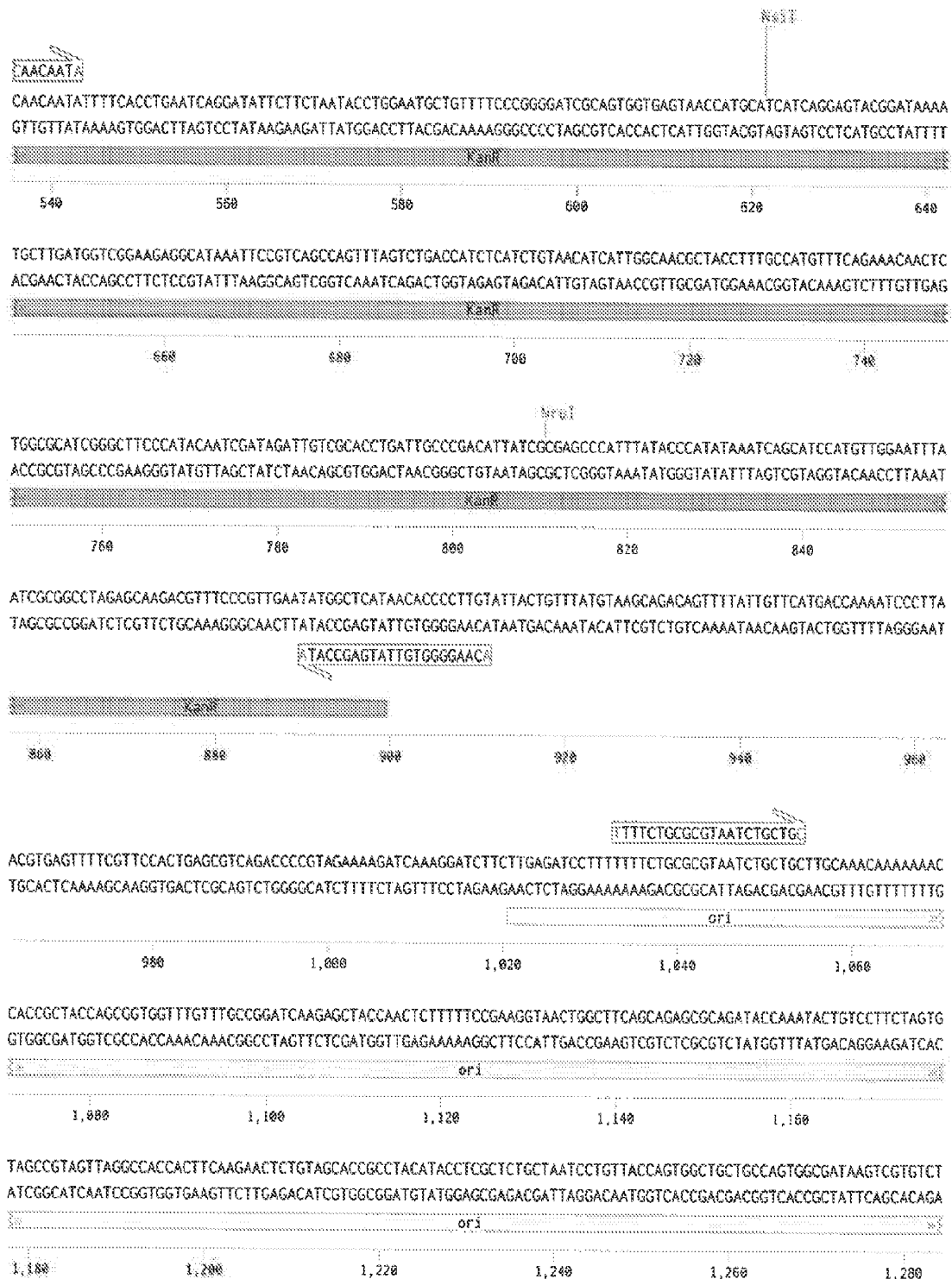


Figure 4C

pAAV.MHCK7.GNE KanR (7270 bp) (from 1285-1926 bp)

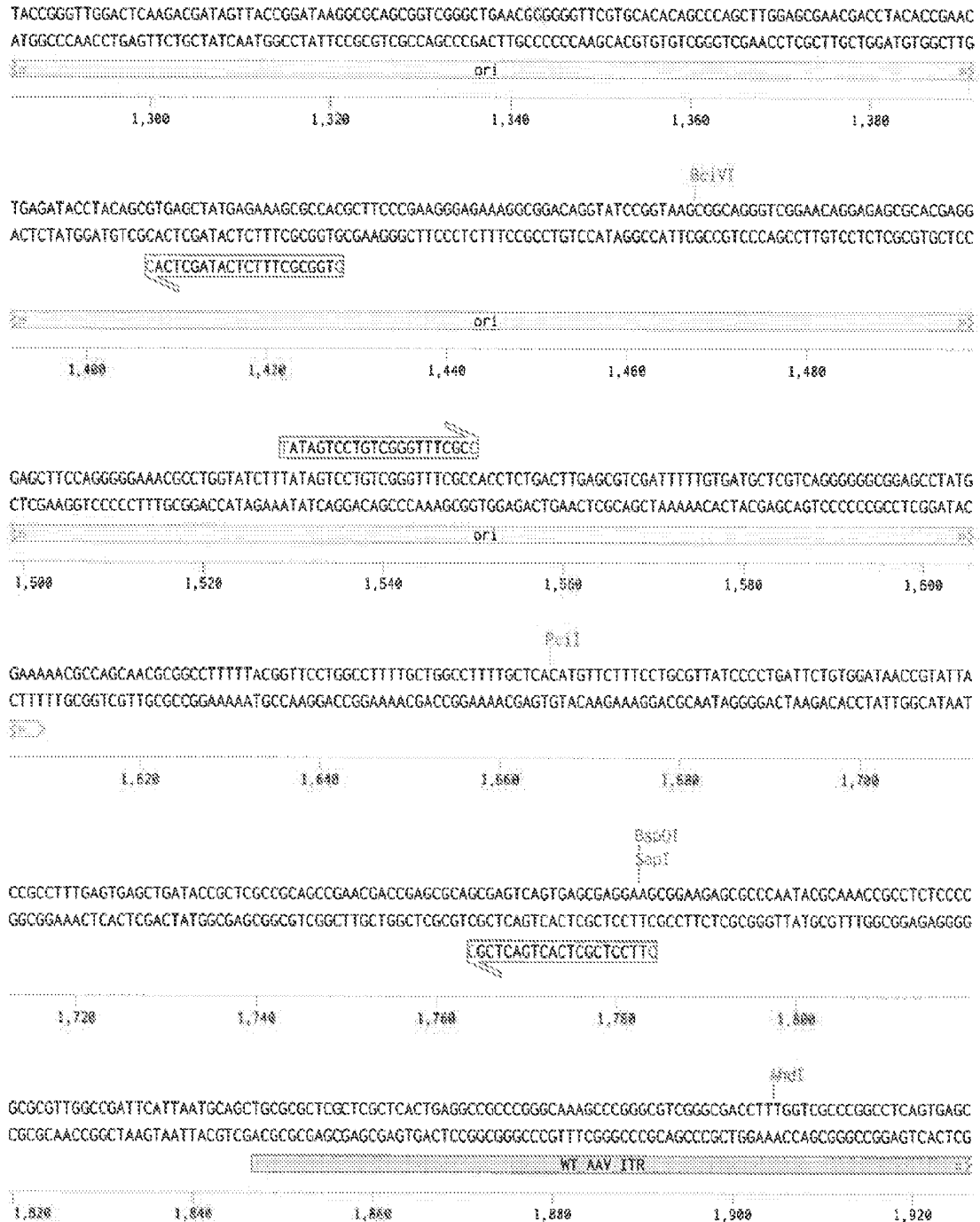


Figure 4D

pAAV.MHCK7.GNE KanR (7270 bp) (from 1927-2568 bp)

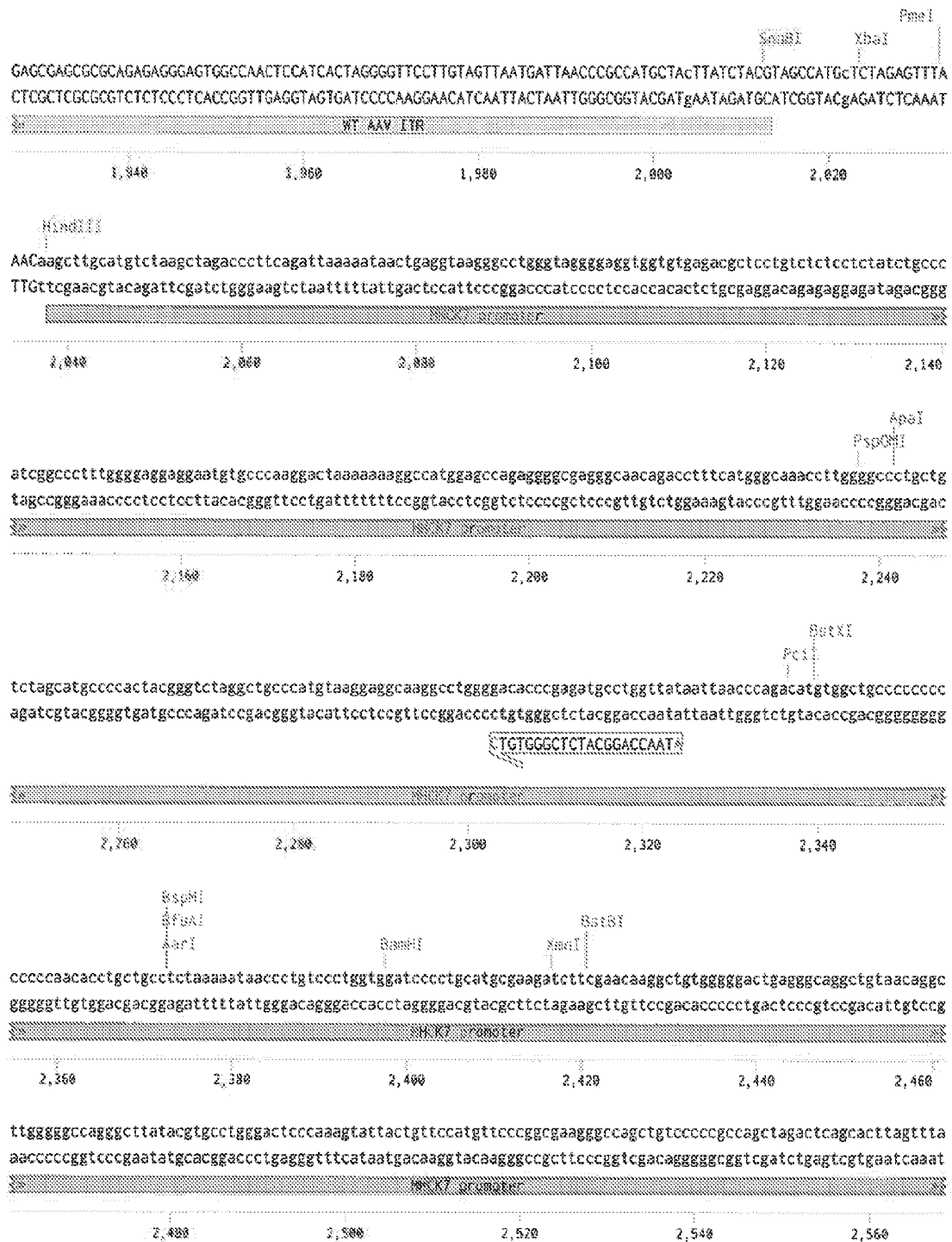


Figure 4E

pAAV.MHCK7.GNE KanR (7270 bp) (from 2569-3103 bp)

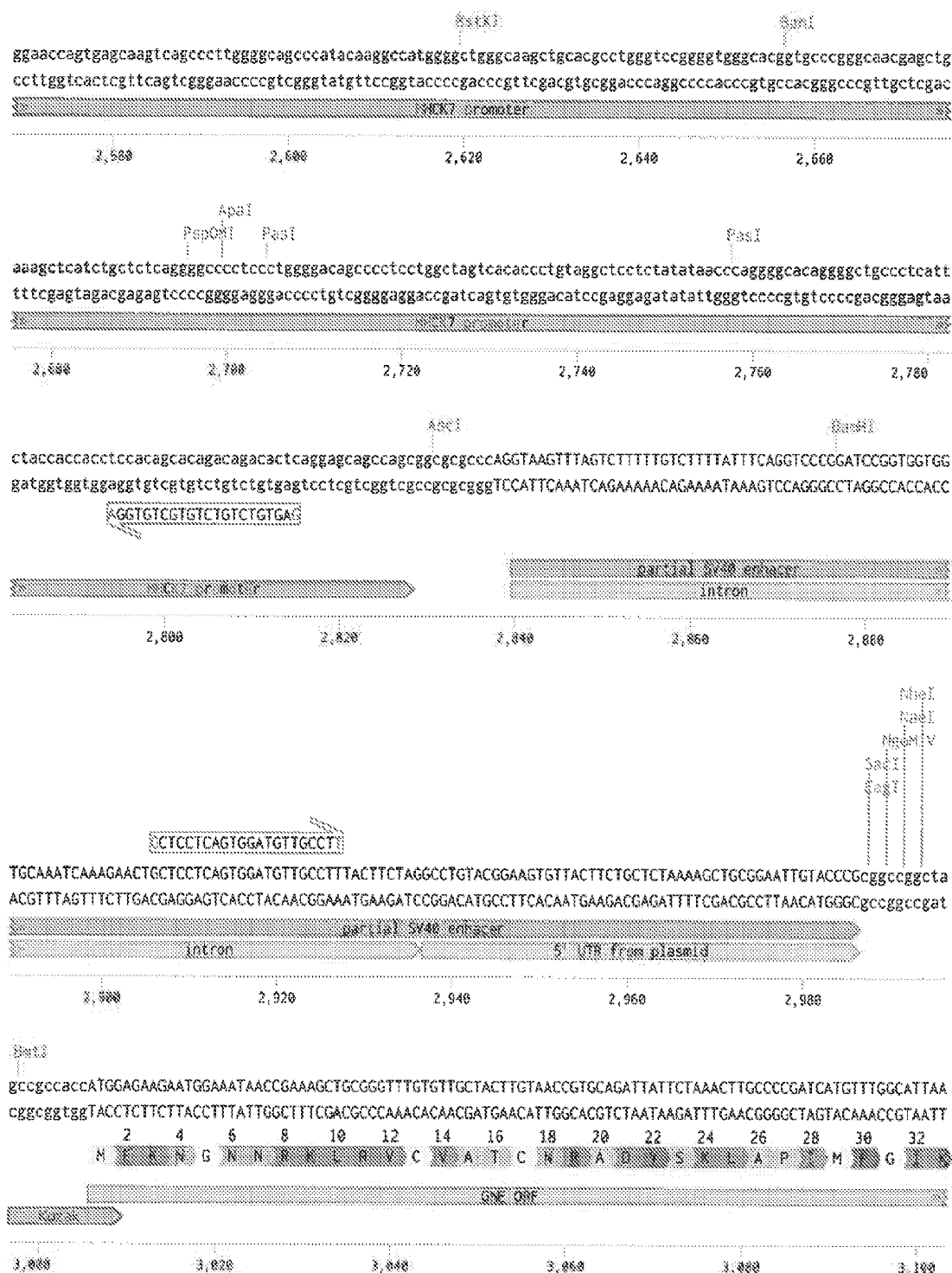


Figure 4F

pAAV.MHCK7.GNE KanR (7270 bp) (from 3104-3638 bp)

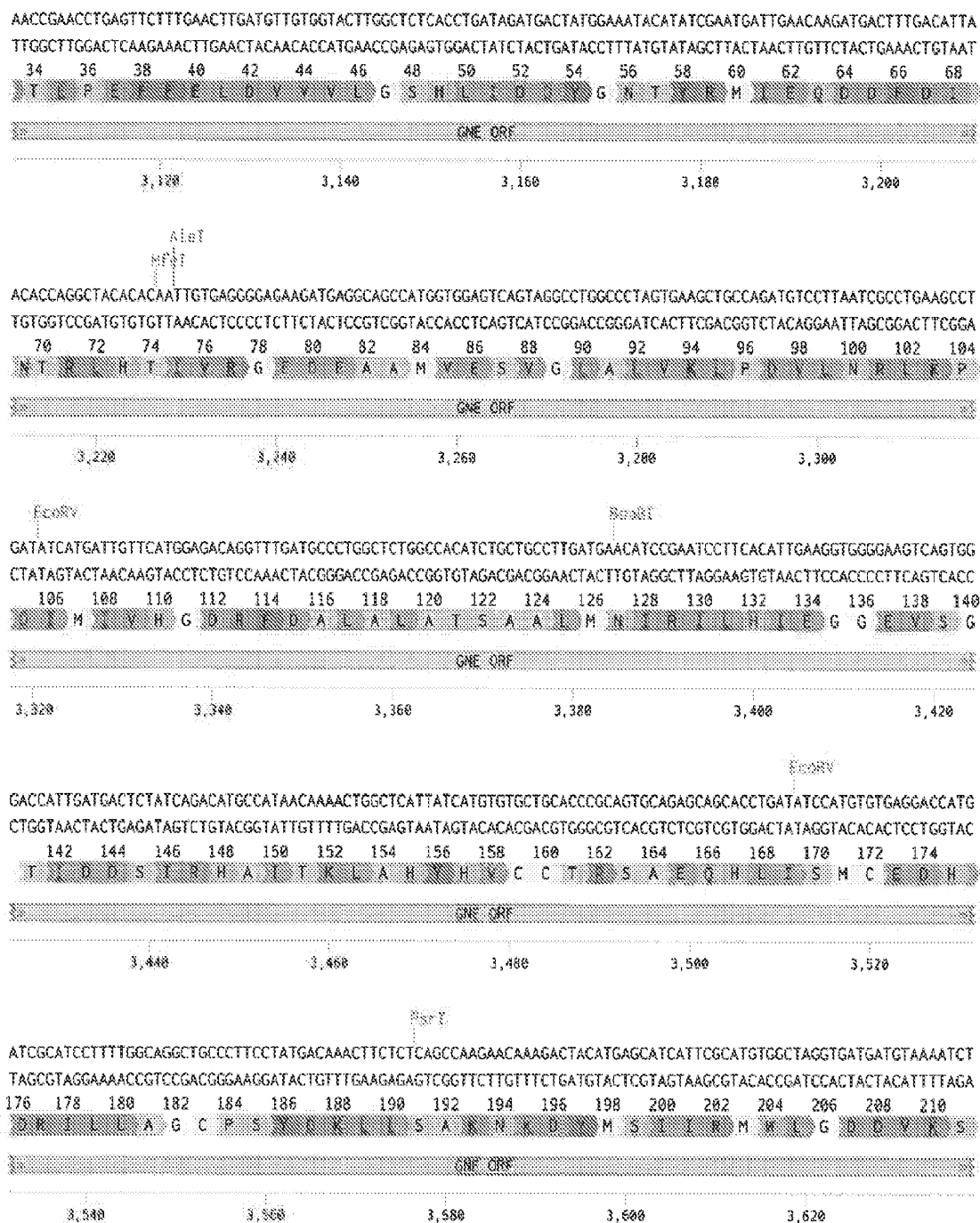


Figure 4G

pAAV.MHCK7.GNE KanR (7270 bp) (from 3639-4173 bp)

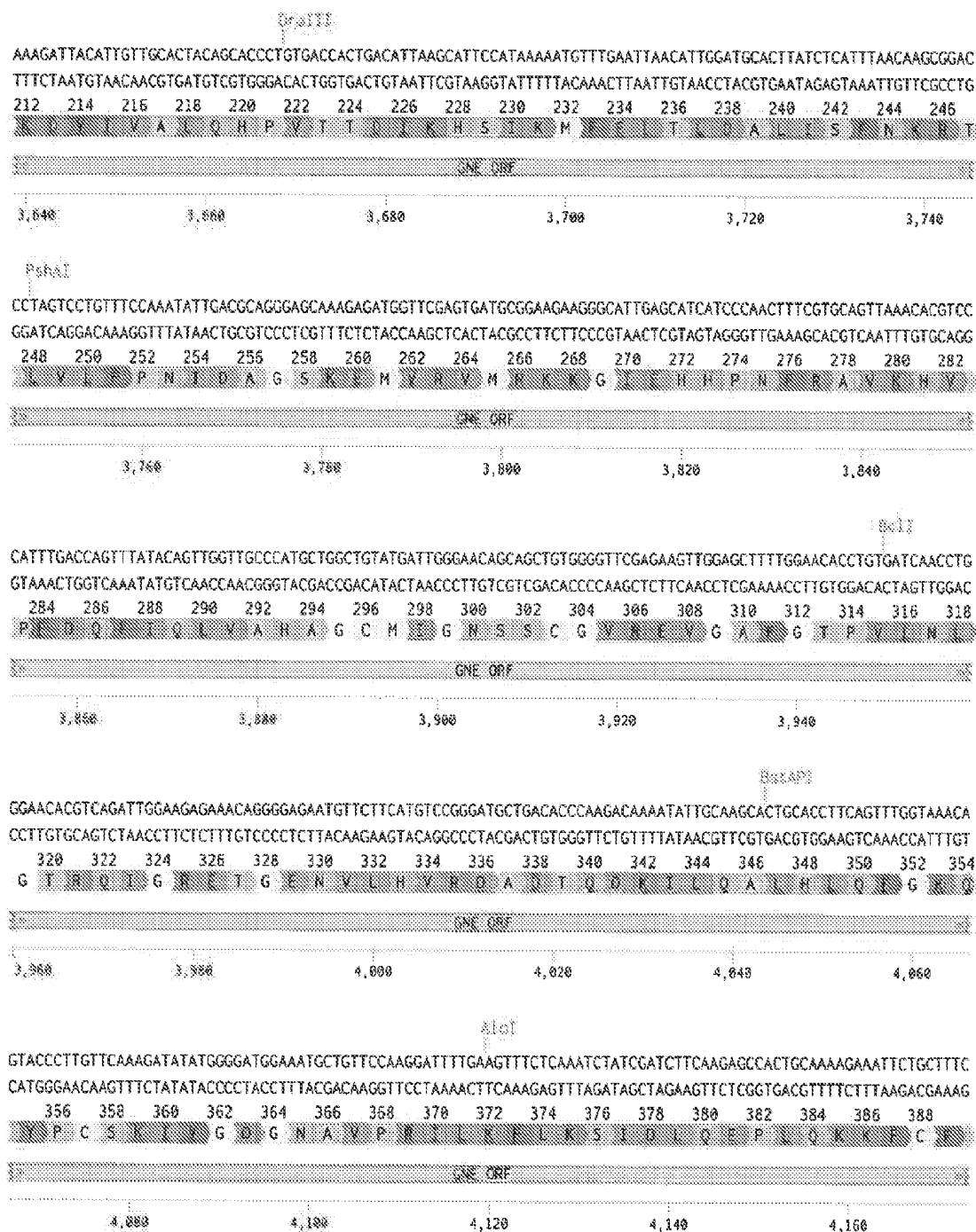


Figure 4H

pAAV.MHCK7.GNE KanR (7270 bp) (from 4174-4708 bp)

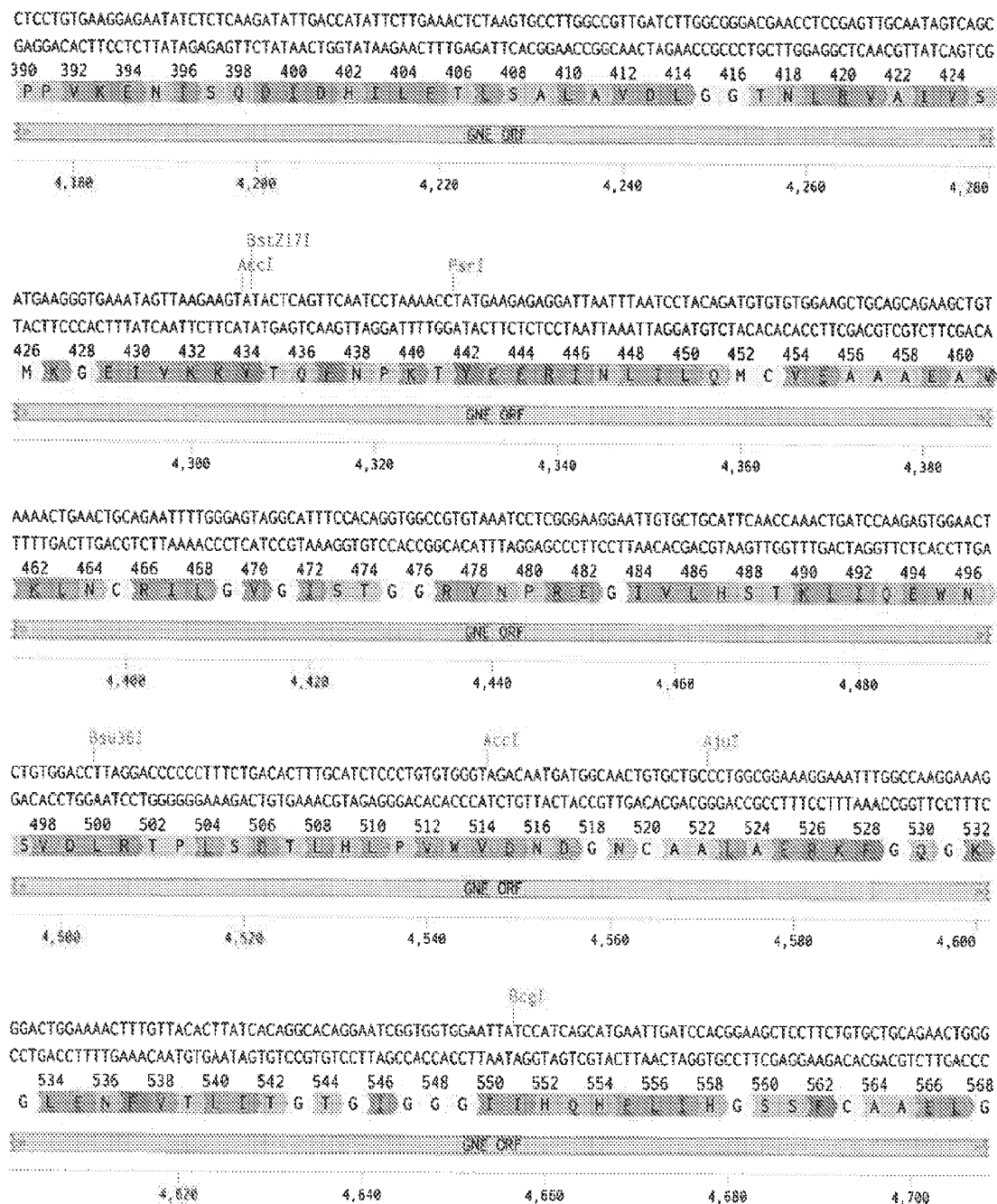


Figure 41

pAAV.MHCK7.GNE KanR (7270 bp) (from 4709-5243 bp)

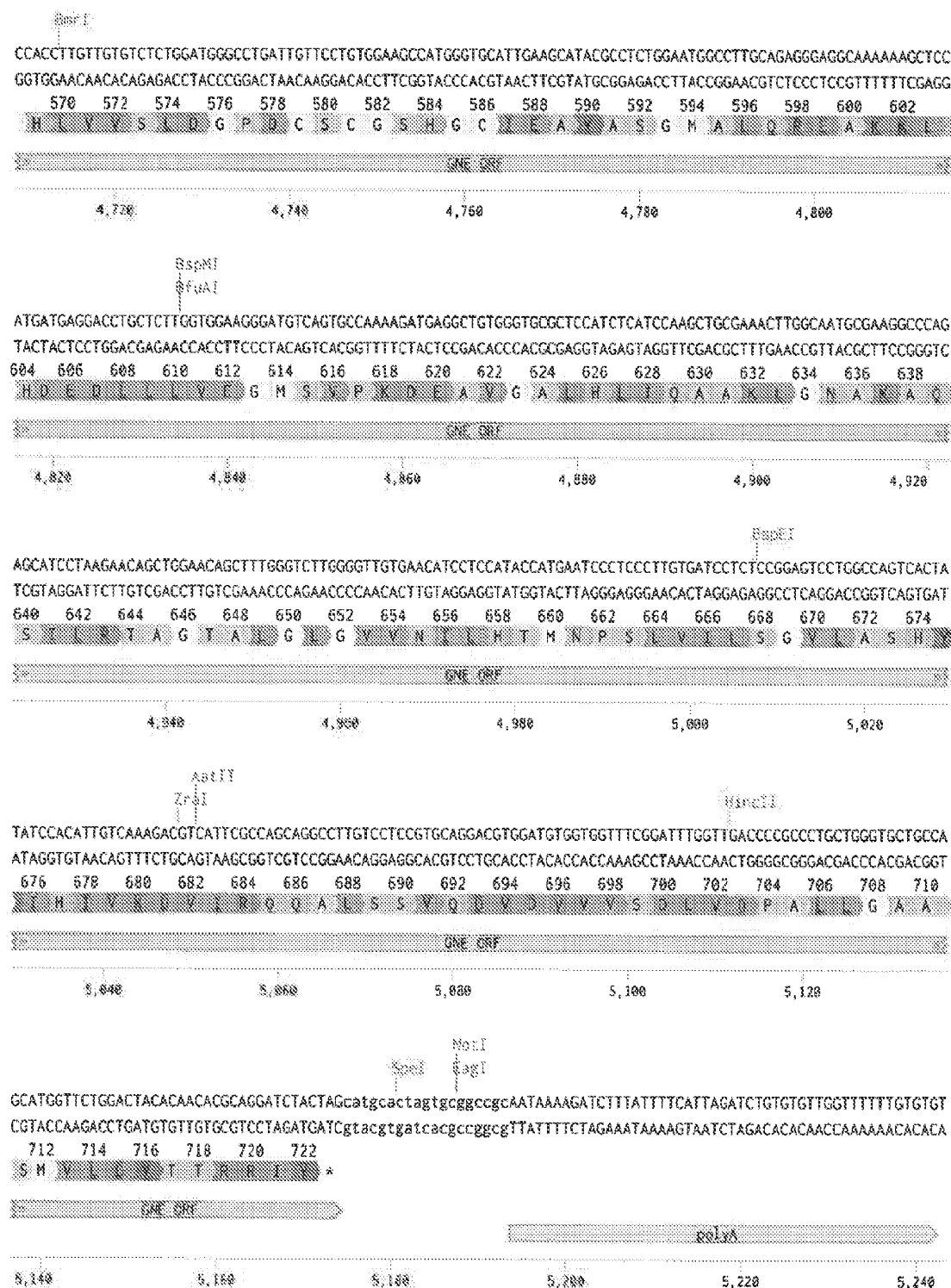


Figure 4J

pAAV.MHCK7.GNE KanR (7270 bp) (from 5244-5992 bp)

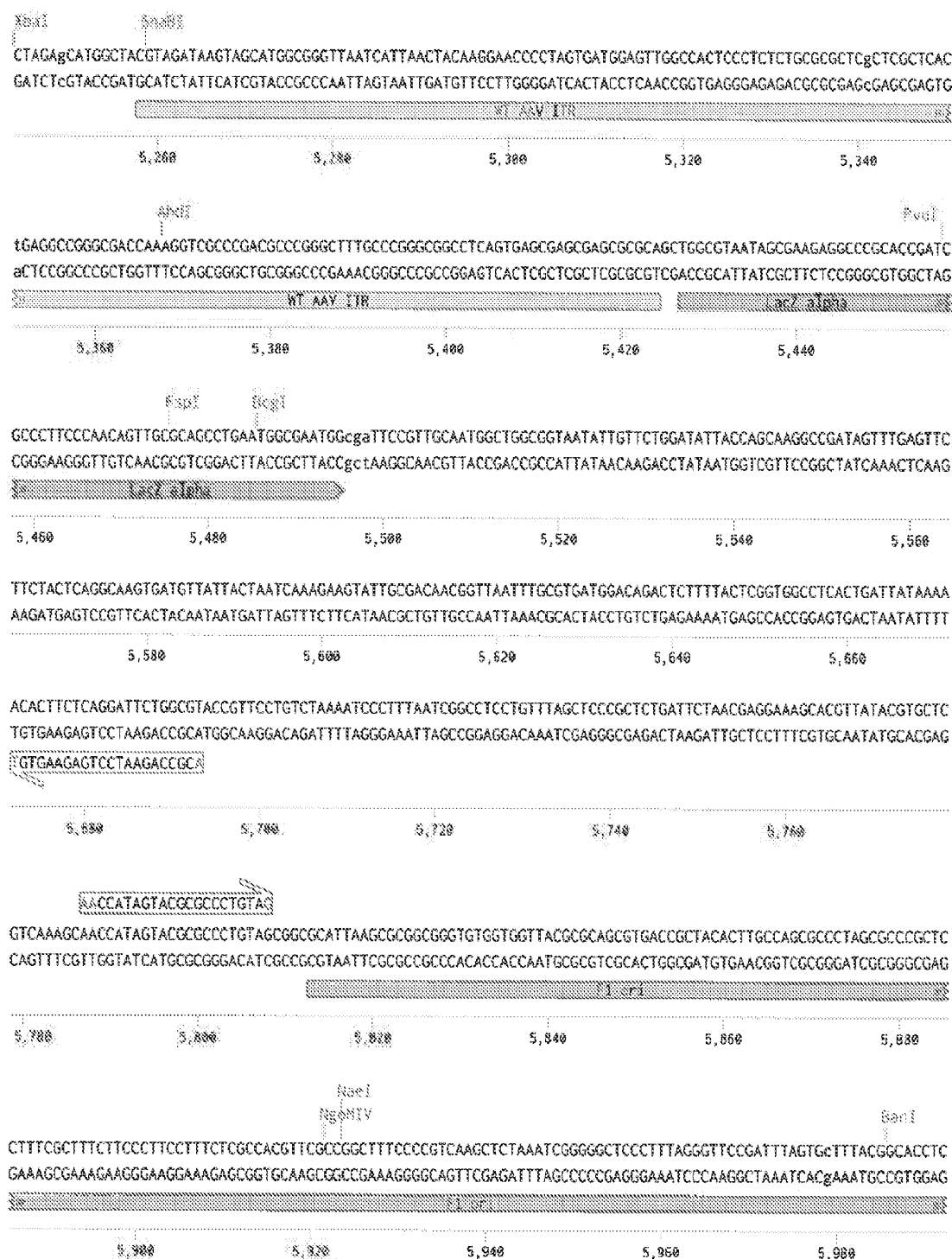


Figure 4K

pAAV.MHCK7.GNE KanR (7270 bp) (from 5993-6741 bp)

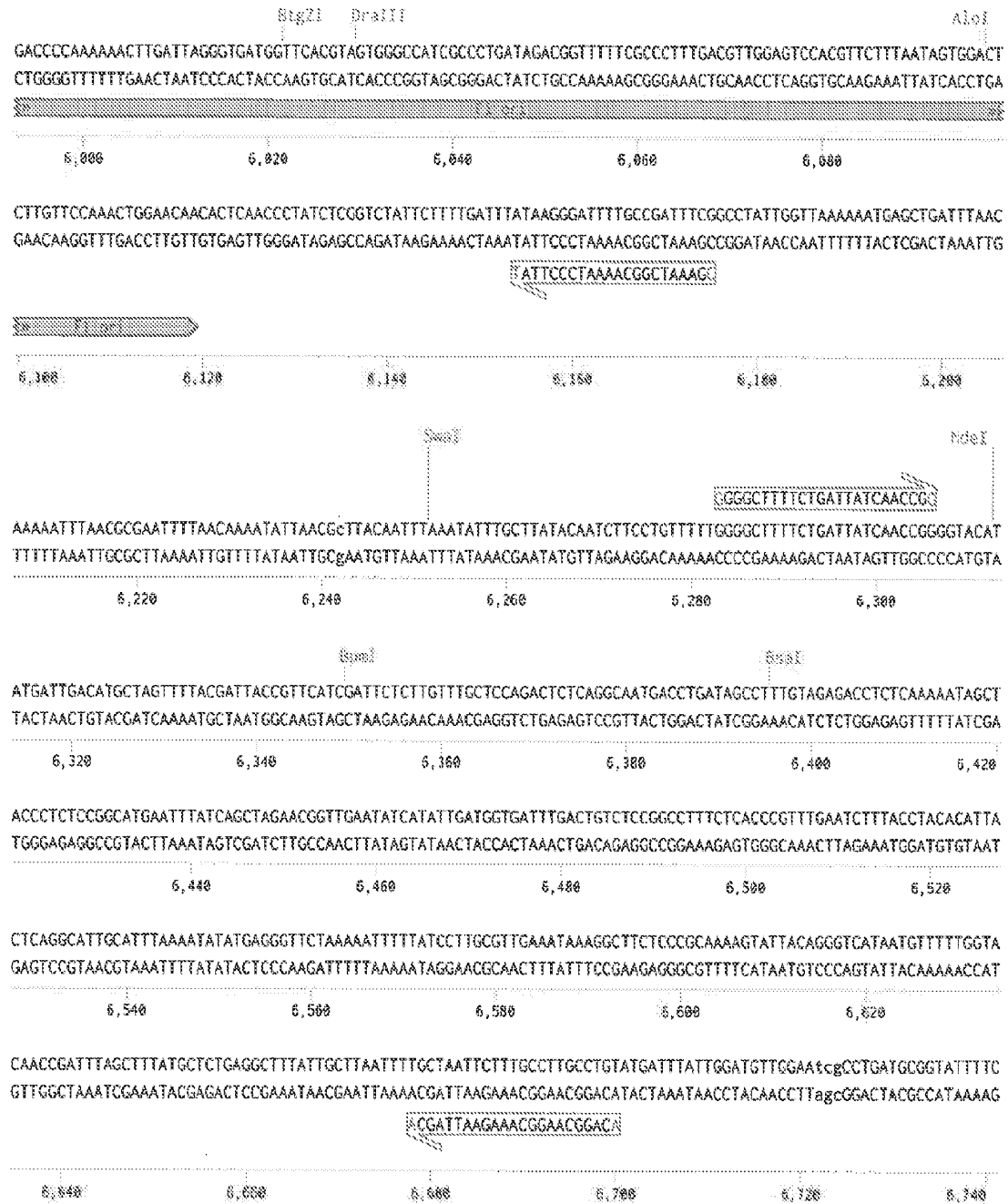


Figure 4L

pAAV.MHCK7.GNE KanR (7270 bp) (from 6742-7270 bp)

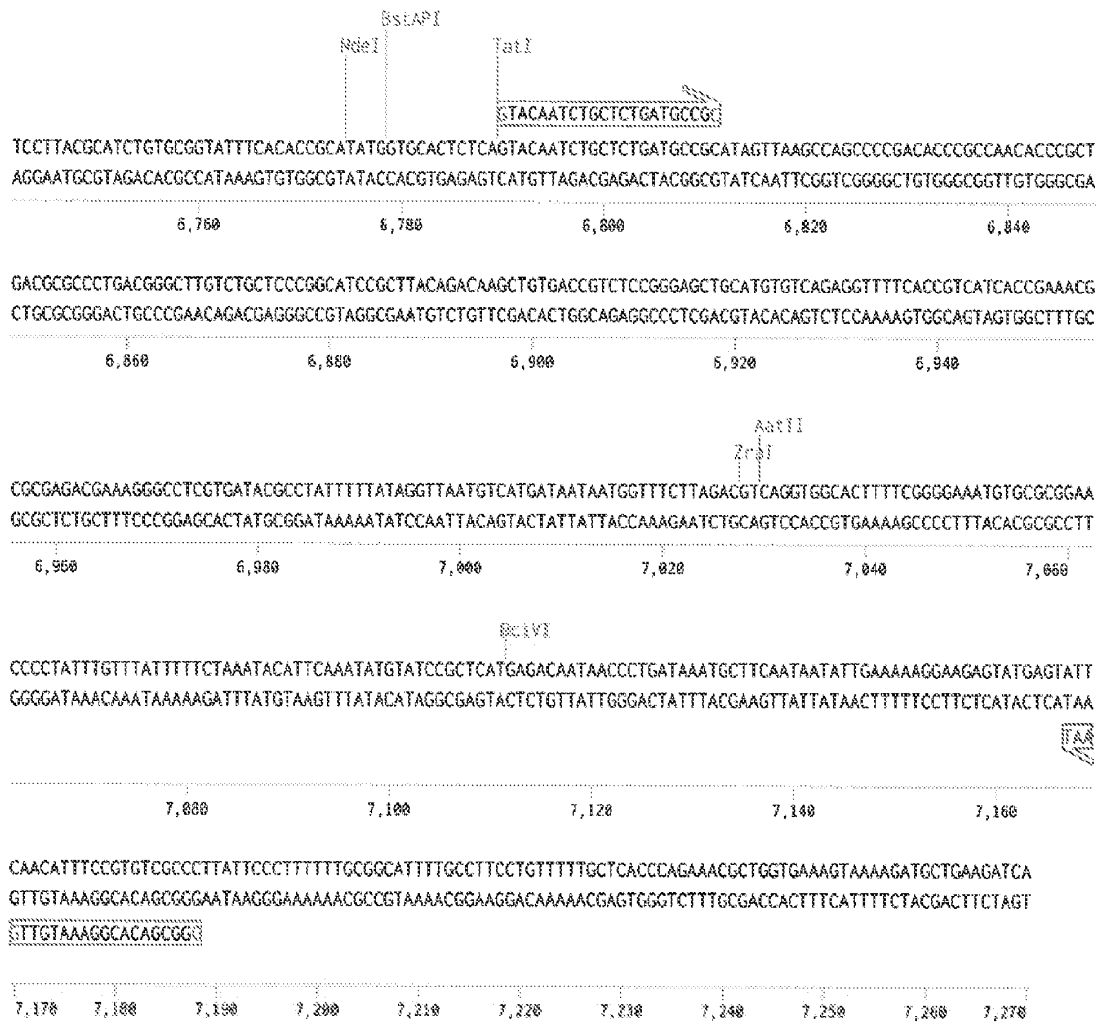


Figure 5A

(from 1-535 bp)

pAAV.GNEpro.GNE KanR (7187 bp)

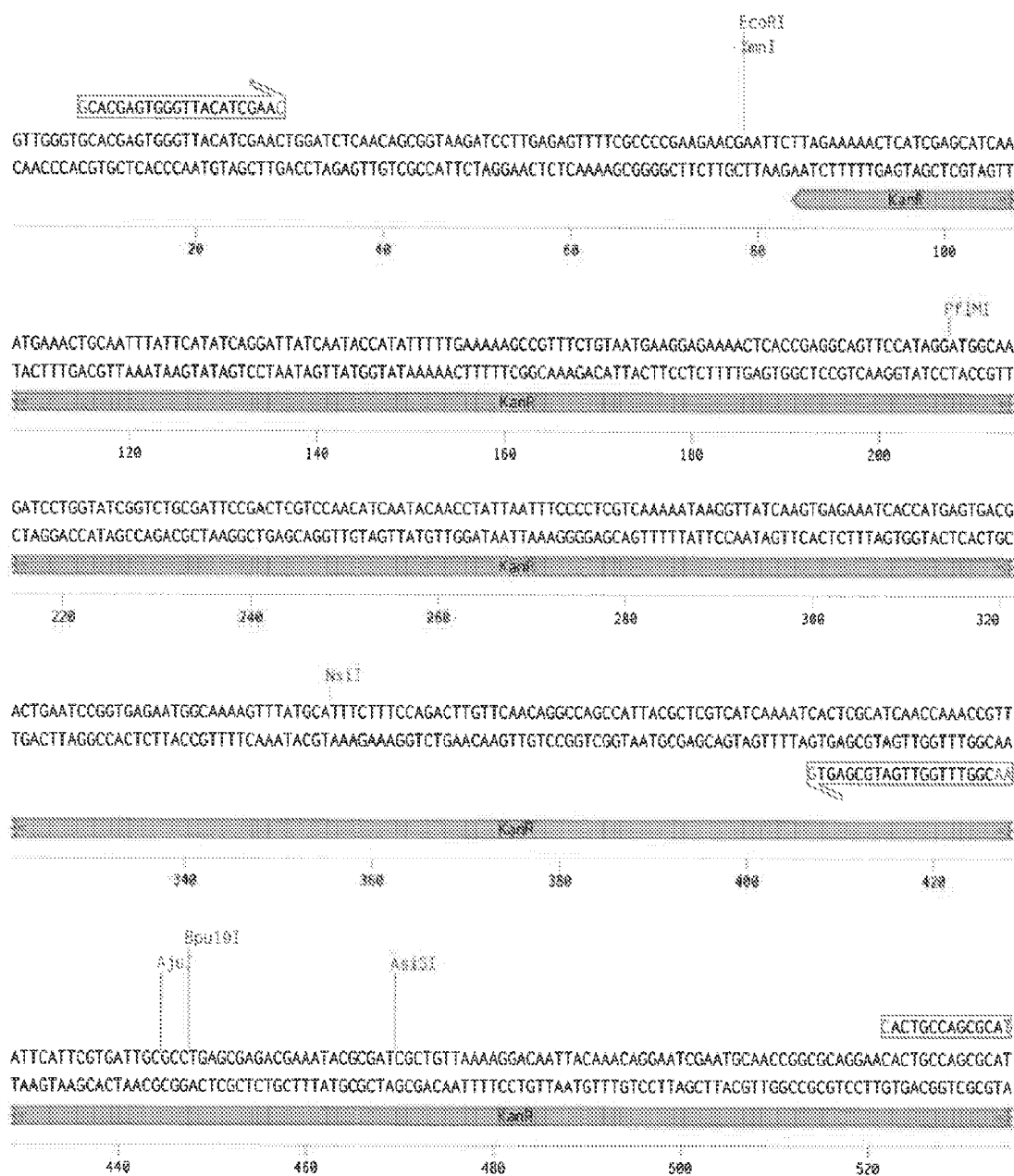


Figure 5B

pAAV.GNEpro.GNE KanR (7187 bp) (from 536-1284 bp)

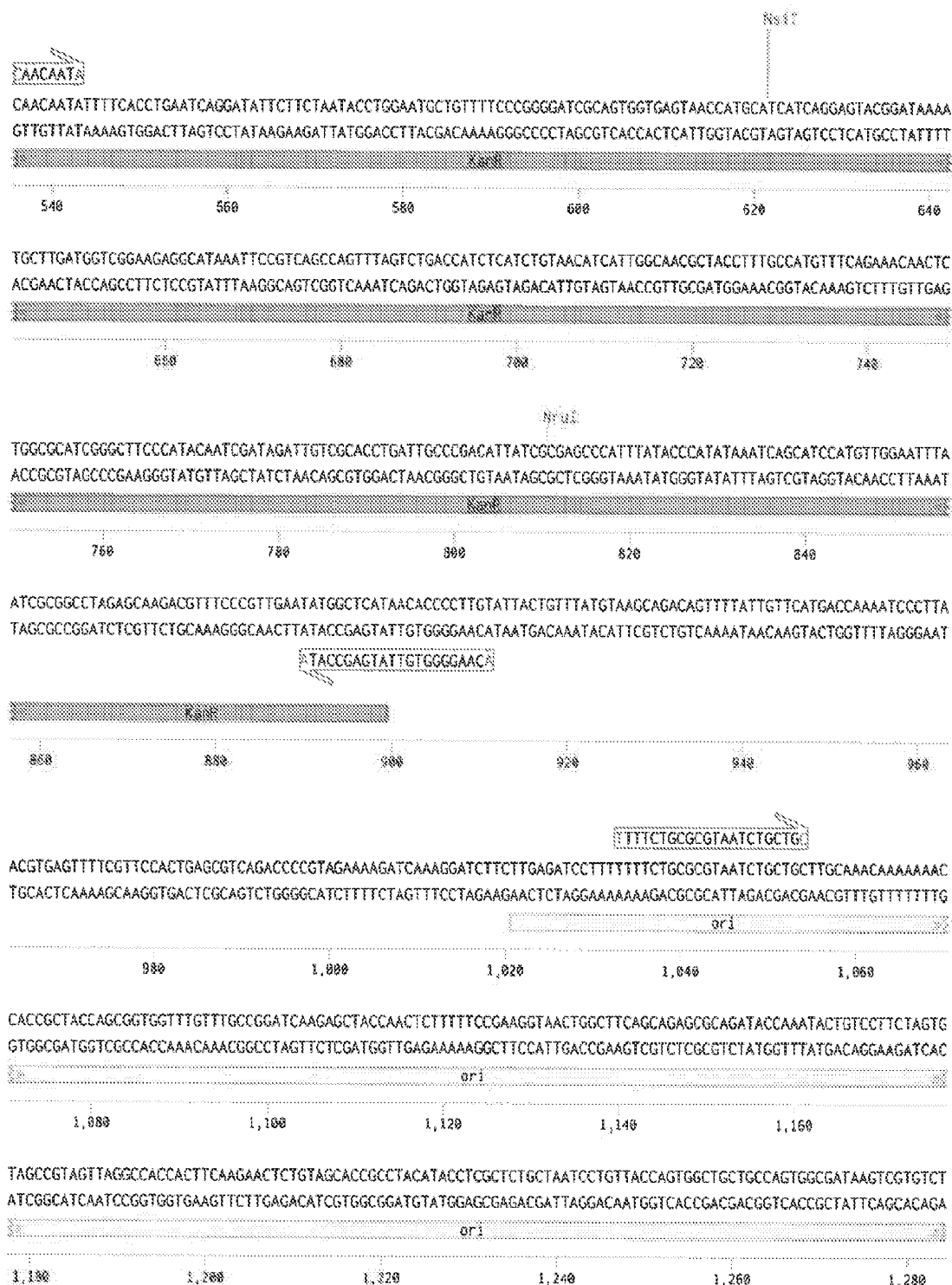


Figure 5C

pAAV.GNEpro.GNE KanR (7187 bp) (from 1285-1926 bp)

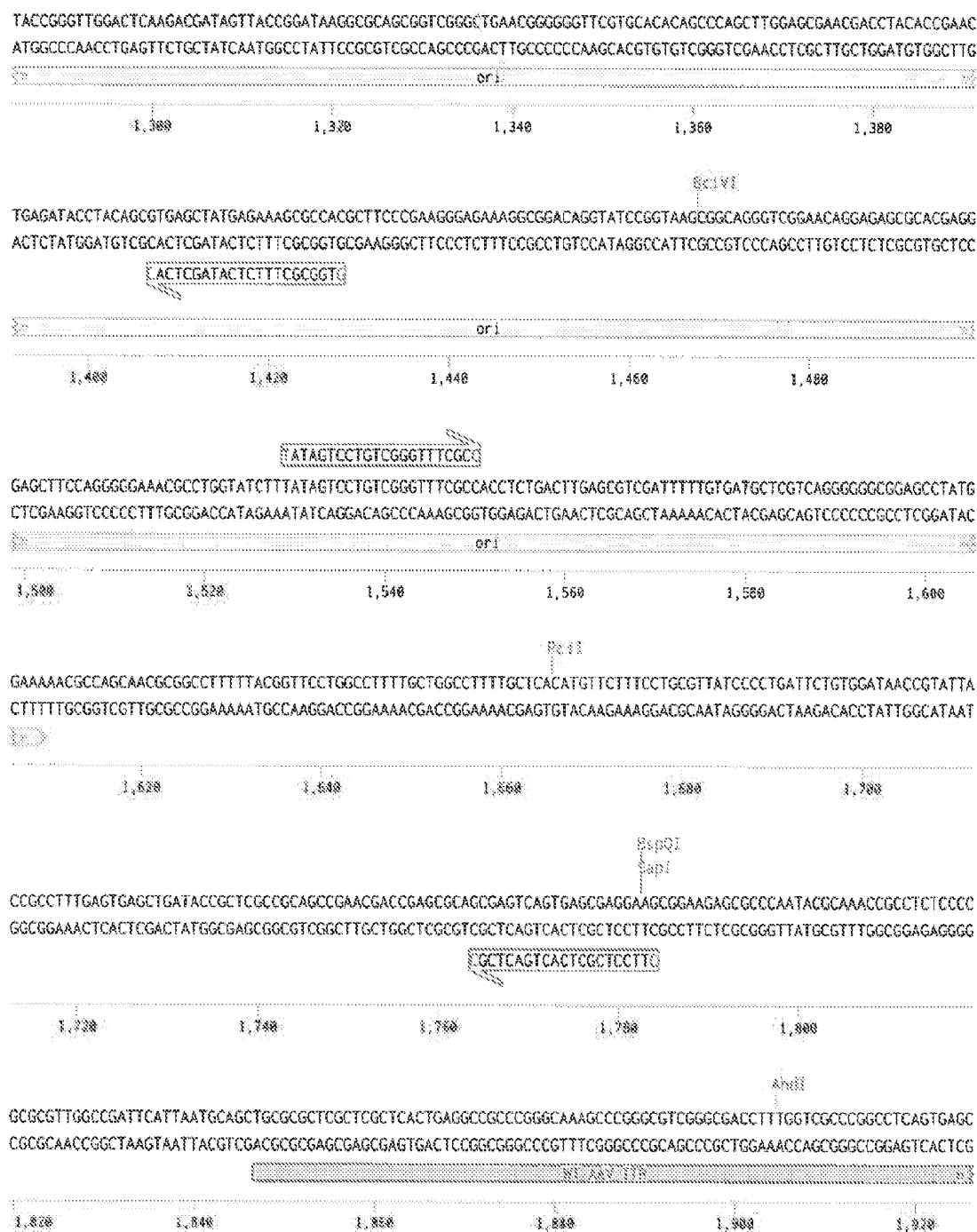


Figure 5D

pAAV.GNEpro.GNE KanR (7187 bp) (from 1927-2461 bp)

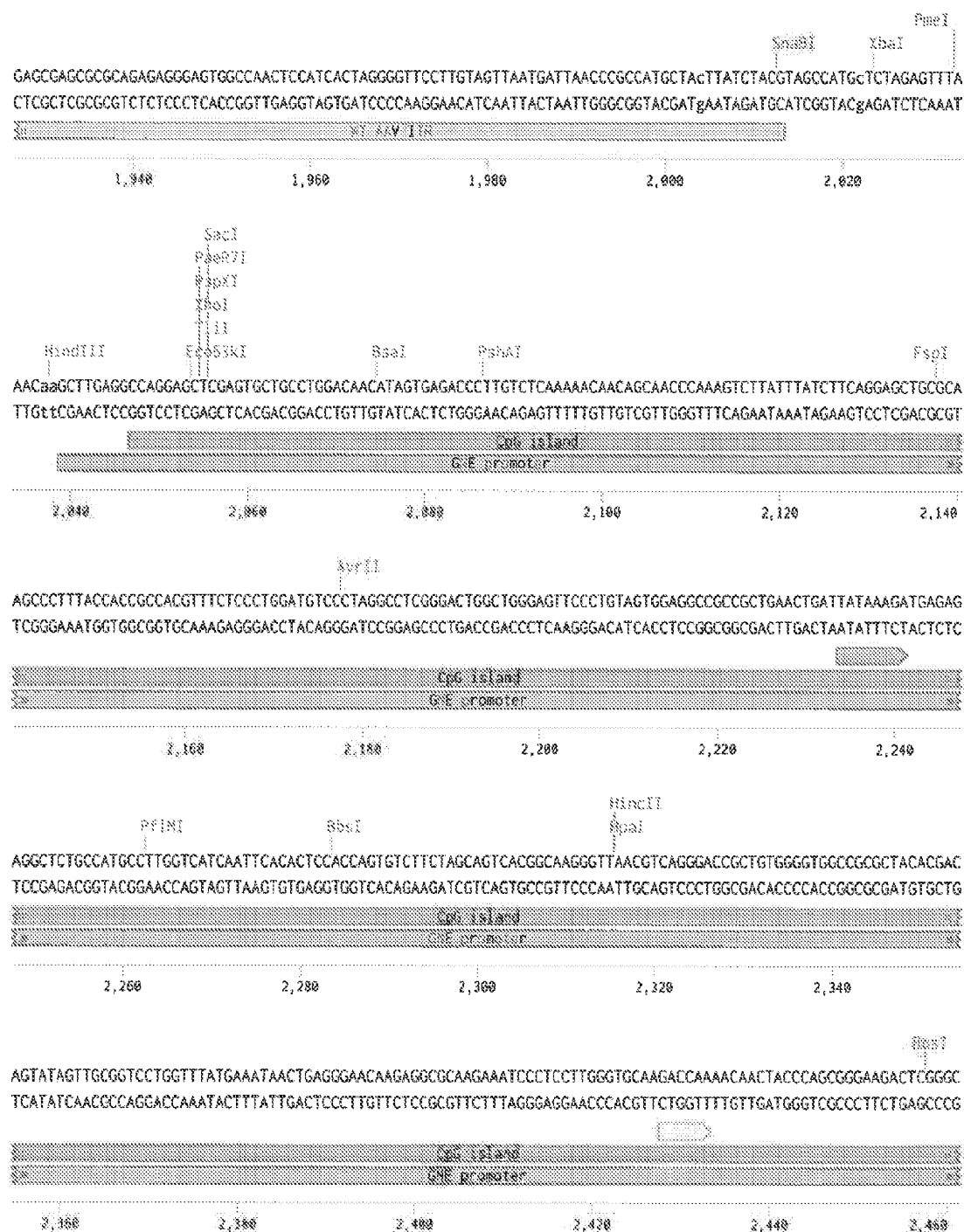


Figure 5E

pAAV.GNEpro.GNE KanR (7187 bp) (from 2462-2996 bp)

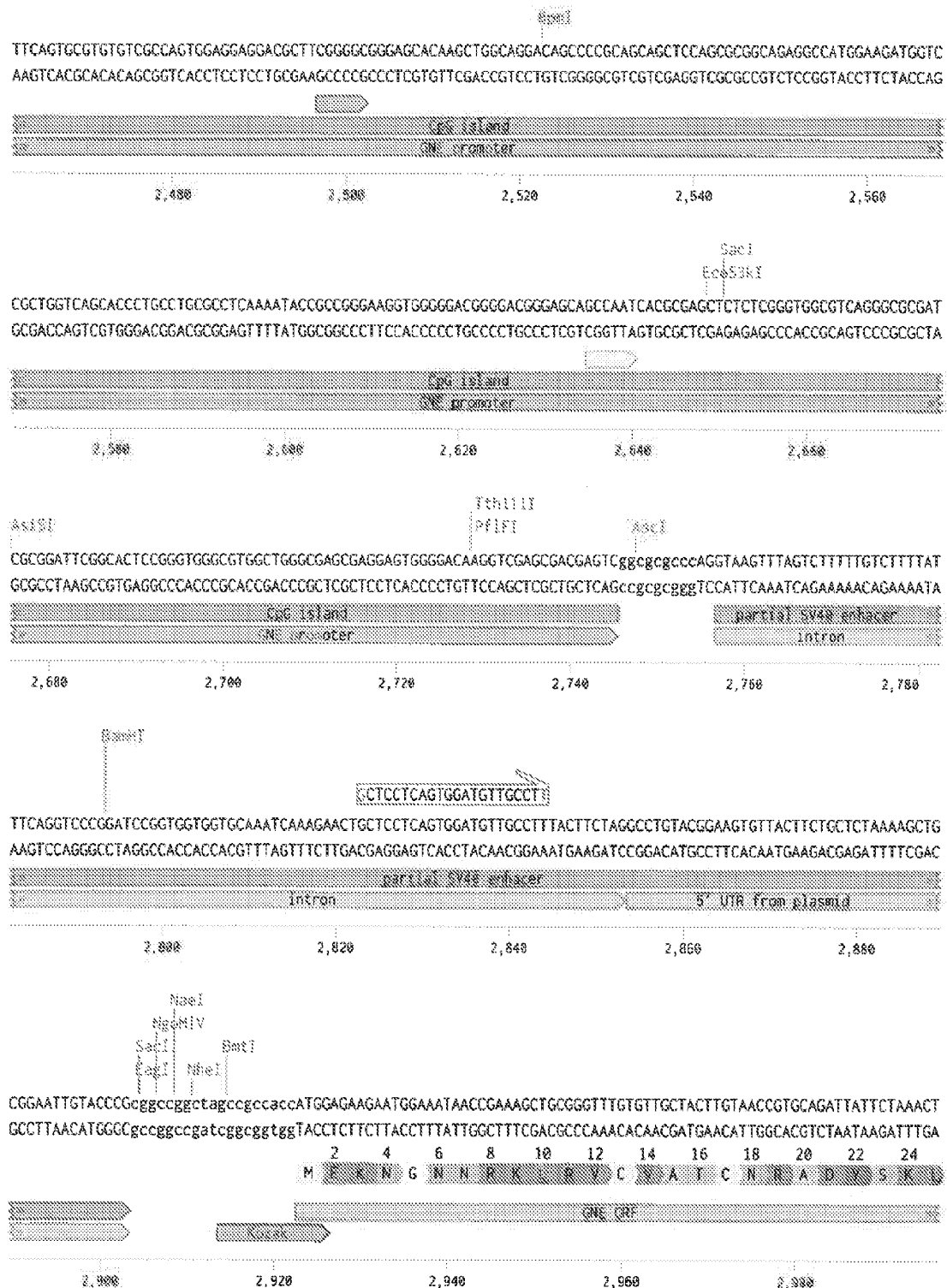


Figure 5F

pAAV.GNEpro.GNE KanR (7187 bp) (from 2997-3531 bp)

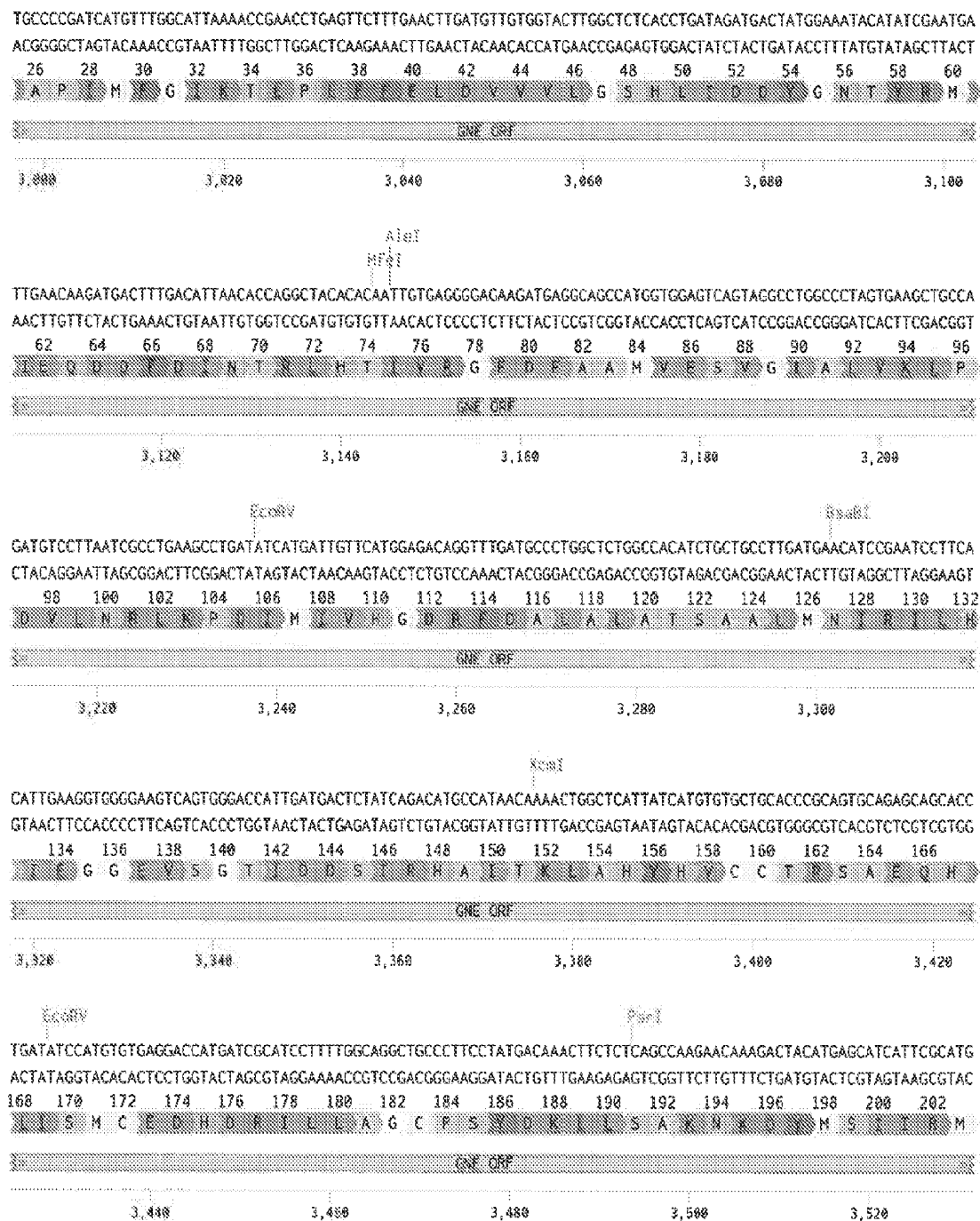


Figure 5G

pAAV.GNEpro.GNE KanR (7187 bp) (from 3532-4066 bp)

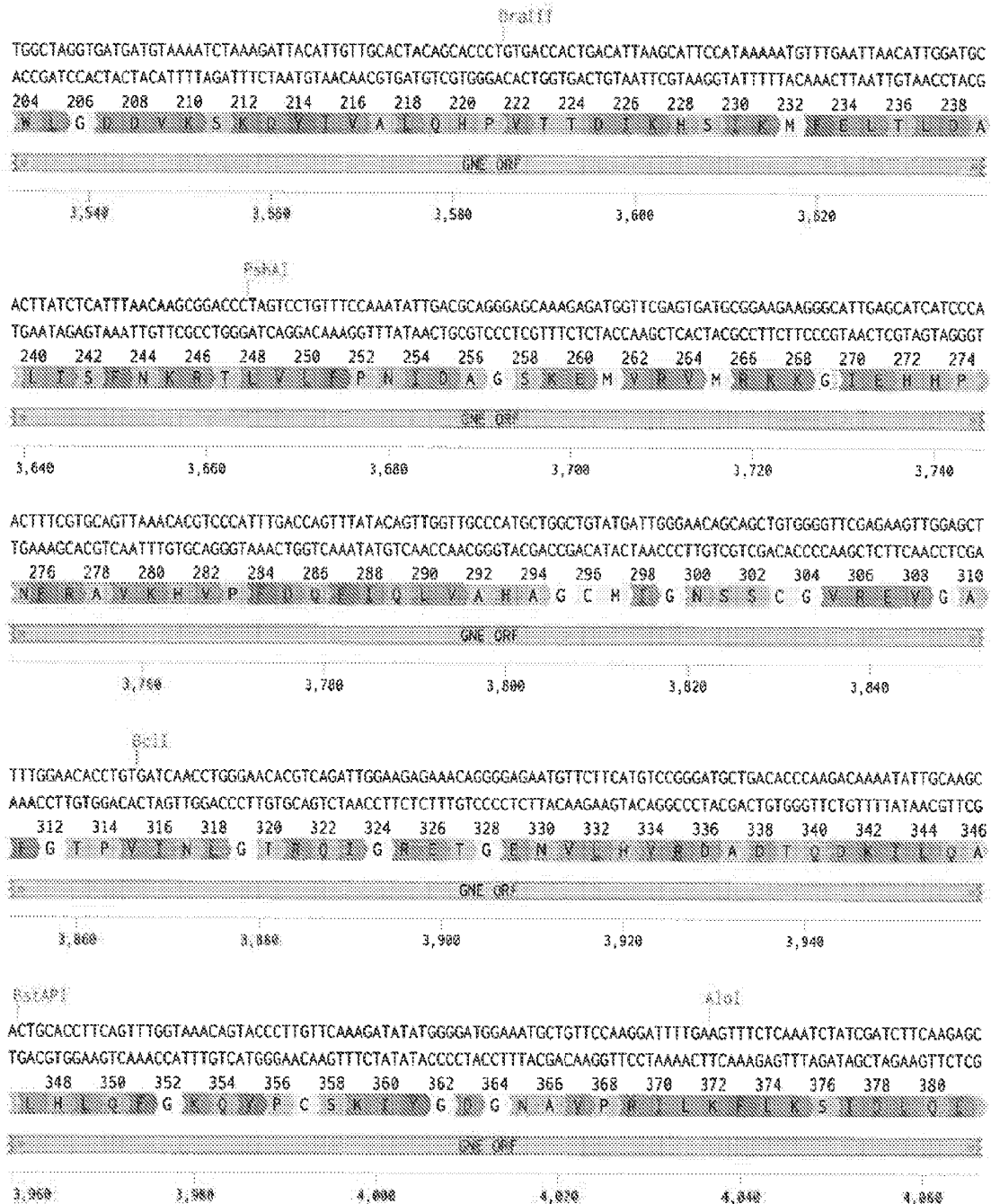


Figure 5H

pAAV.GNEpro.GNE KanR (7187 bp) (from 4067-4601 bp)

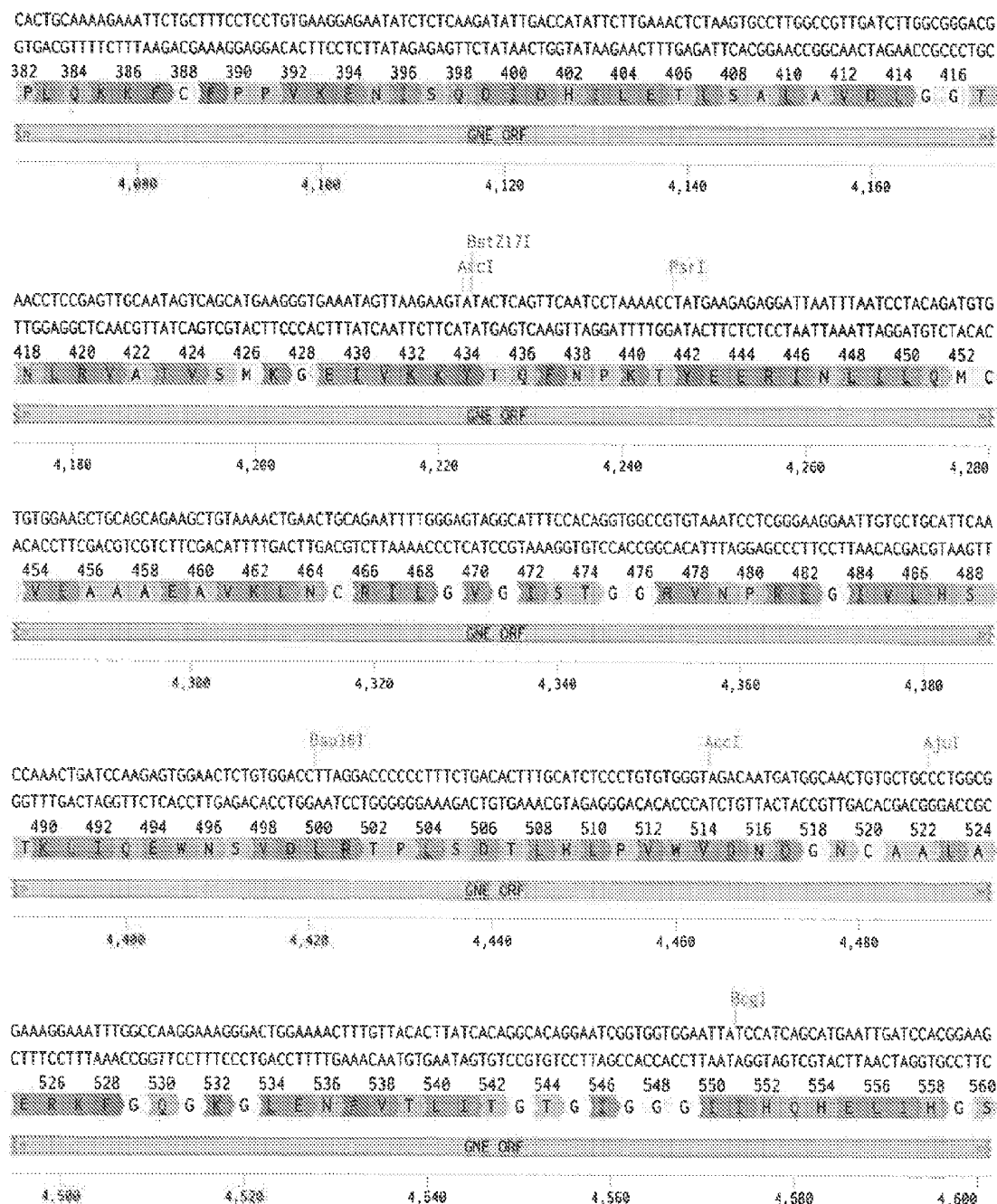


Figure 5I

pAAV.GNEpro.GNE KanR (7187 bp) (from 4602-5136 bp)

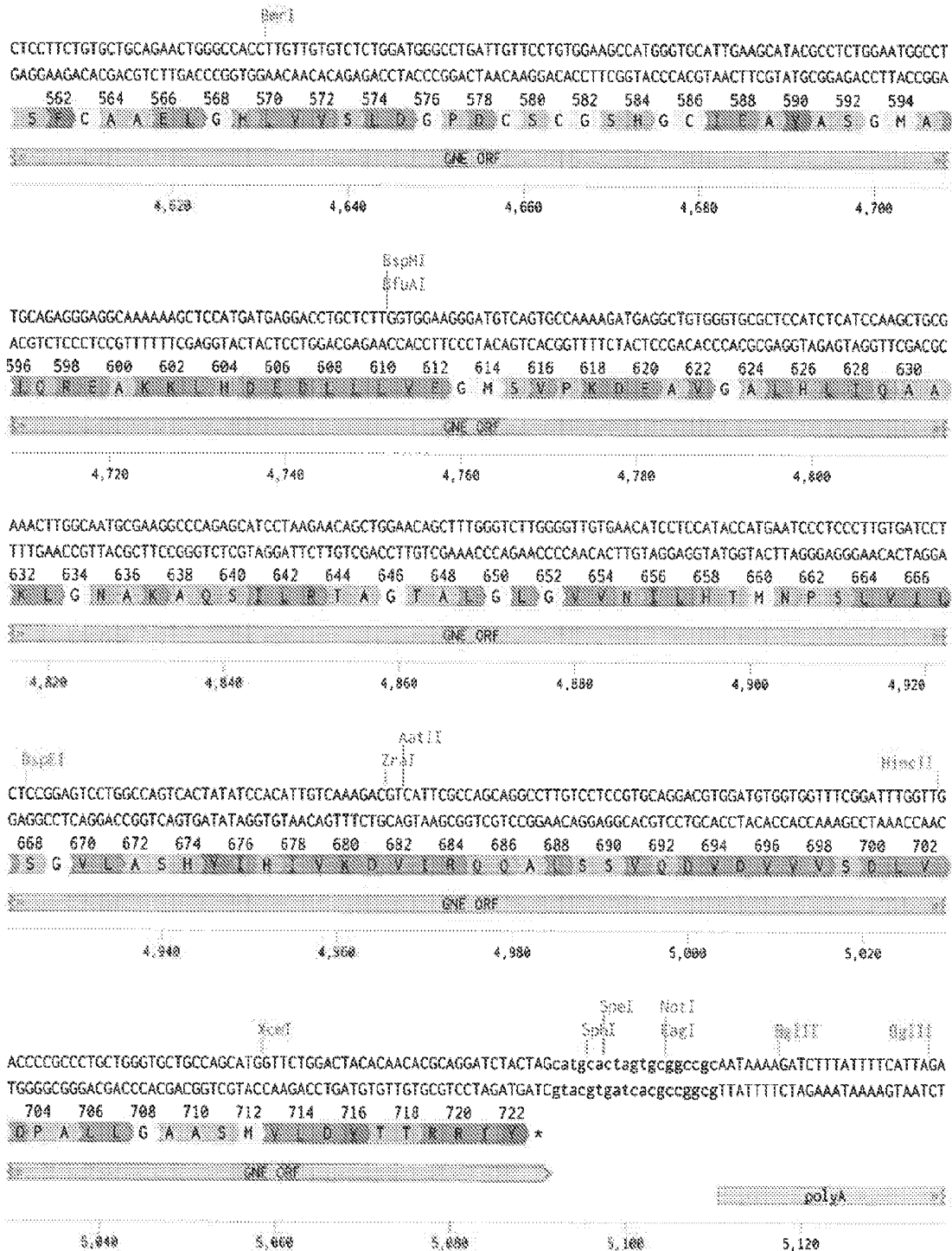


Figure 5J

pAAV.GNEpro.GNE KanR (7187 bp) (from 5137-5885 bp)

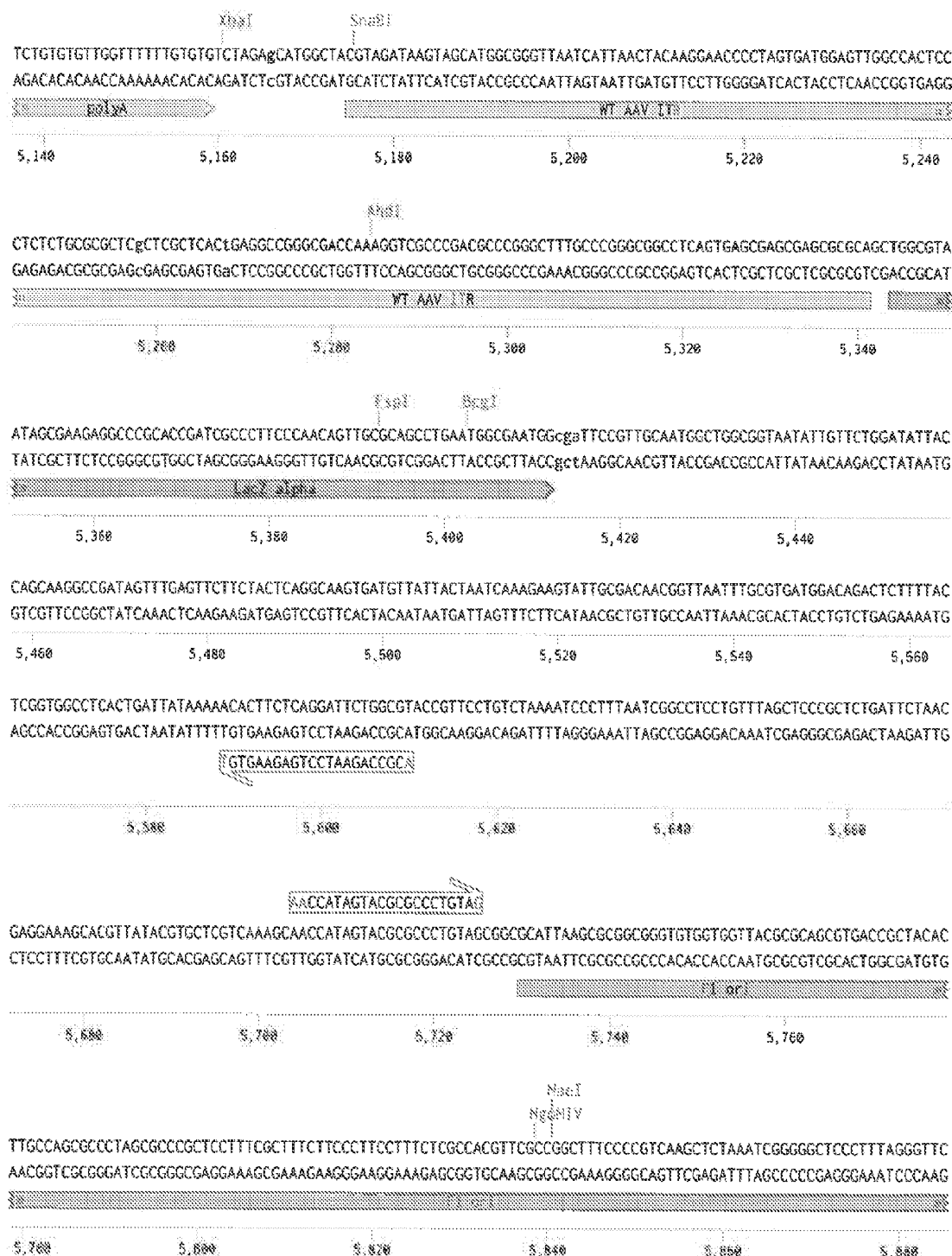


Figure 5K

pAAV.GNEpro.GNE KanR (7187 bp) (from 5886-6634 bp)

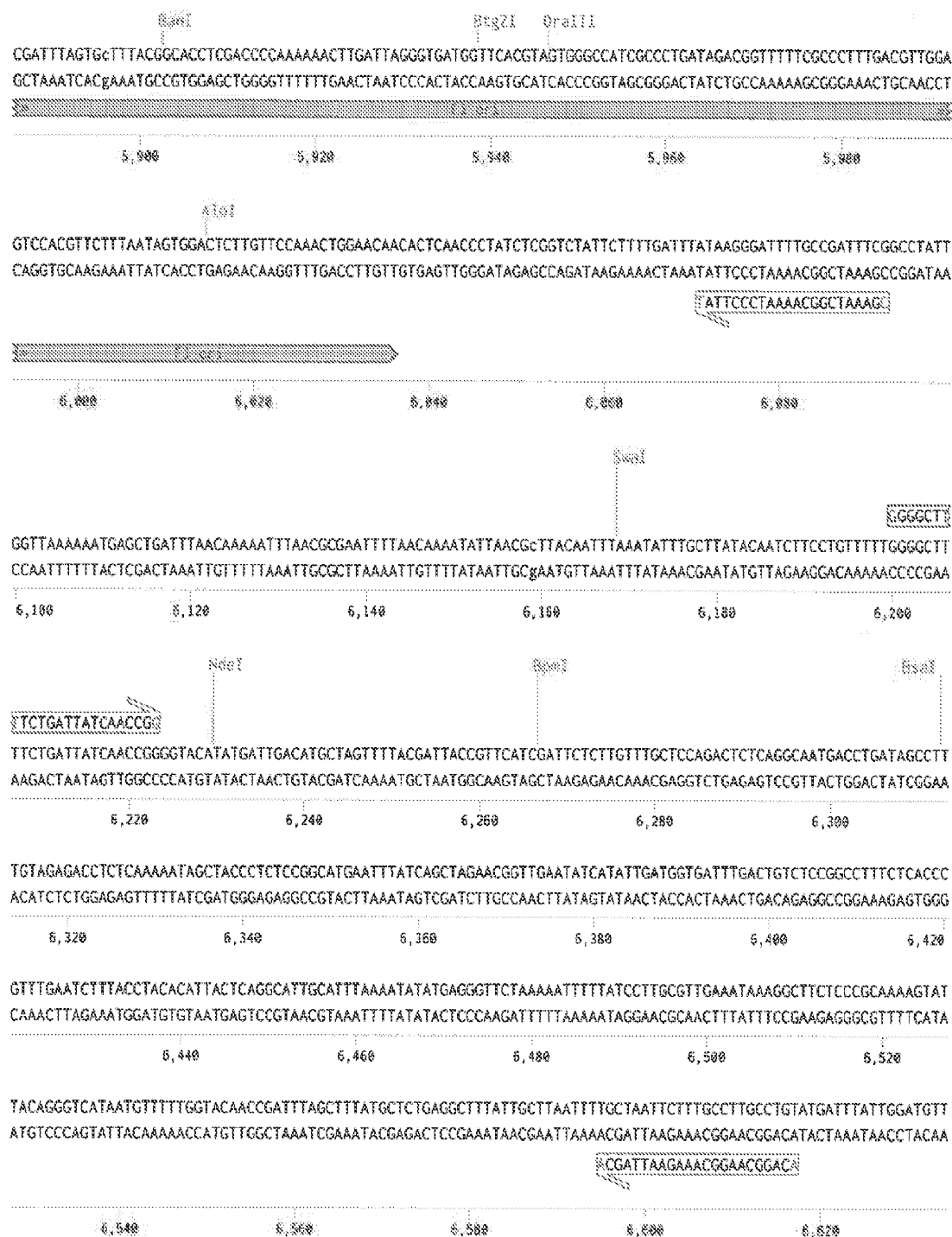


Figure 5L

pAAV.GNEpro.GNE KanR (7187 bp) (from 6635-7187 bp)

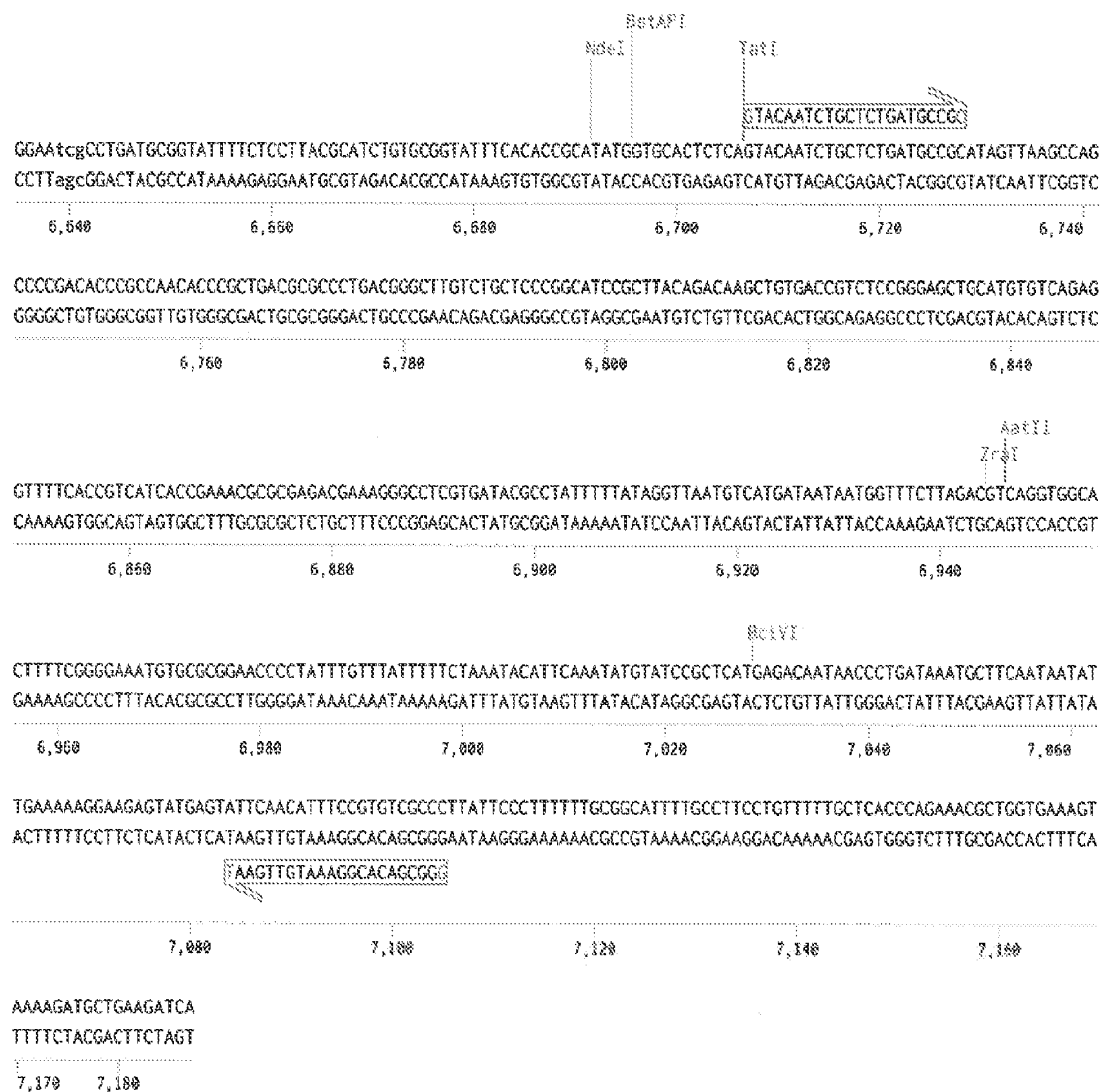


Figure 6A

(from 1-535 bp)

pAAV.MHCK7.GNE.minIRES-FST344 KanR (8423 bp)

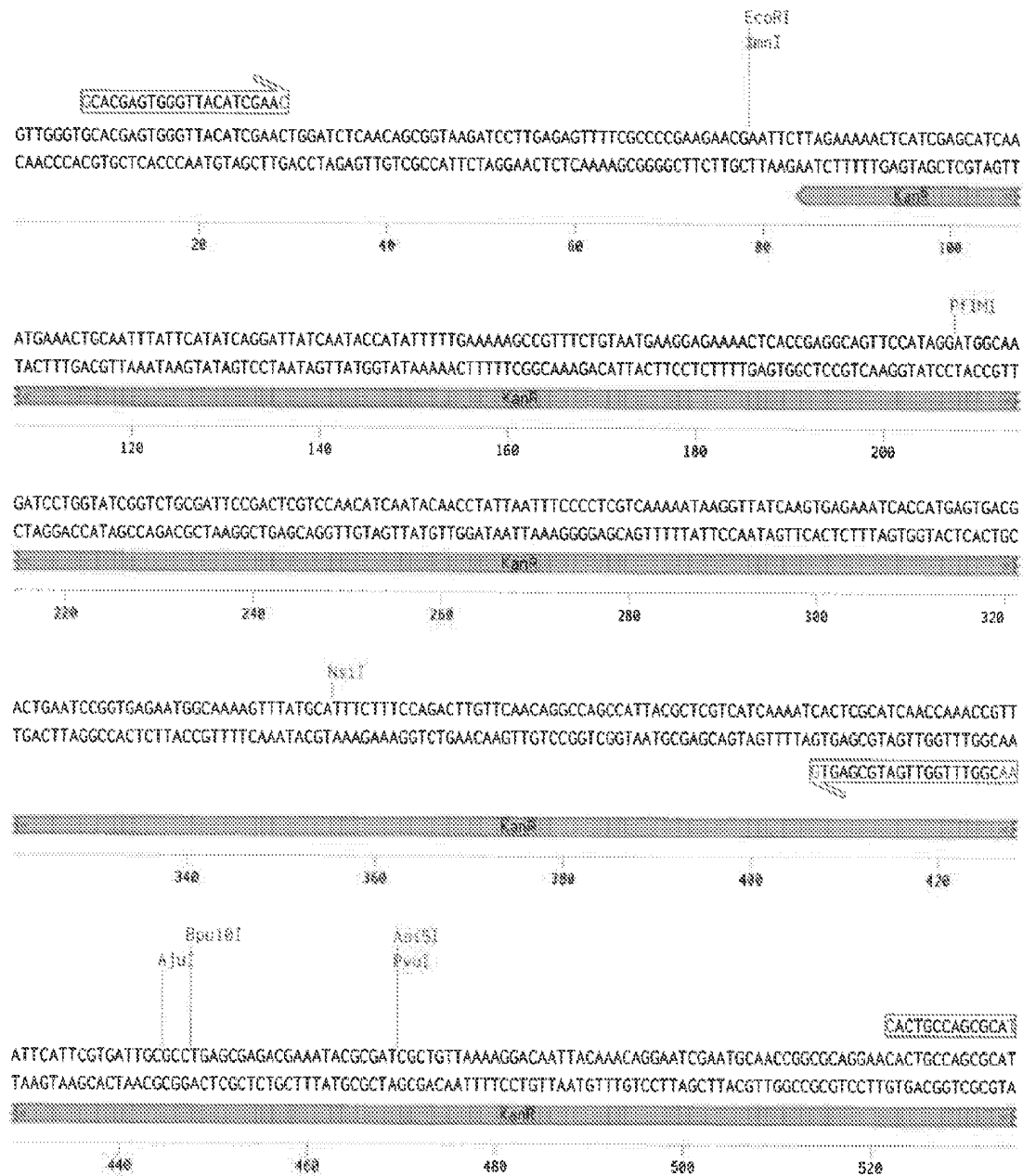


Figure 6B

pAAV.MHCK7.GNE.miniRES-F5T344 KanR (8423 bp) (from 536-1284 bp)

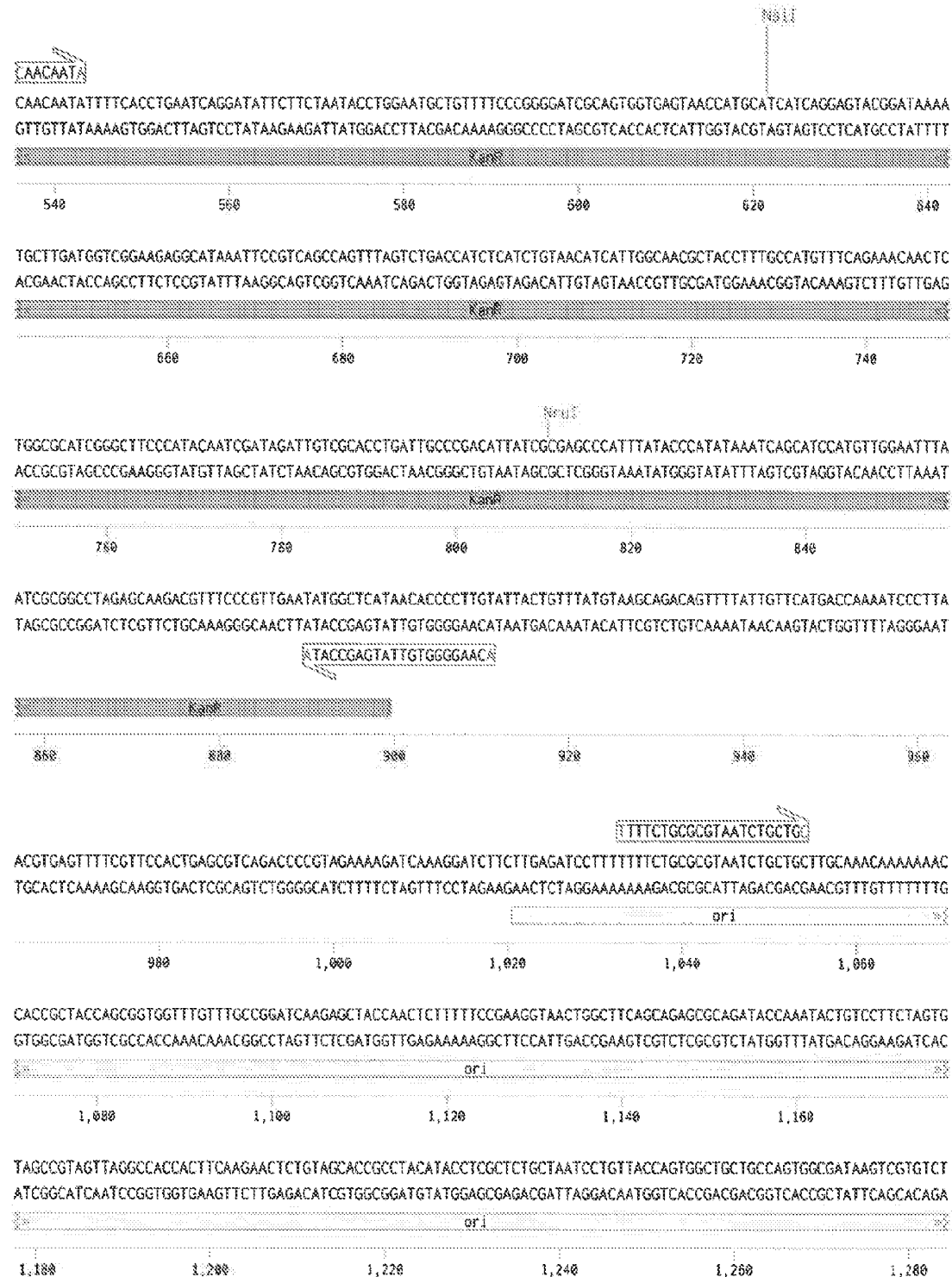


Figure 6C

pAAV.MHCK7.GNE.miniIRES-FST344 KanR (8423 bp) (from 1285-2033 bp)

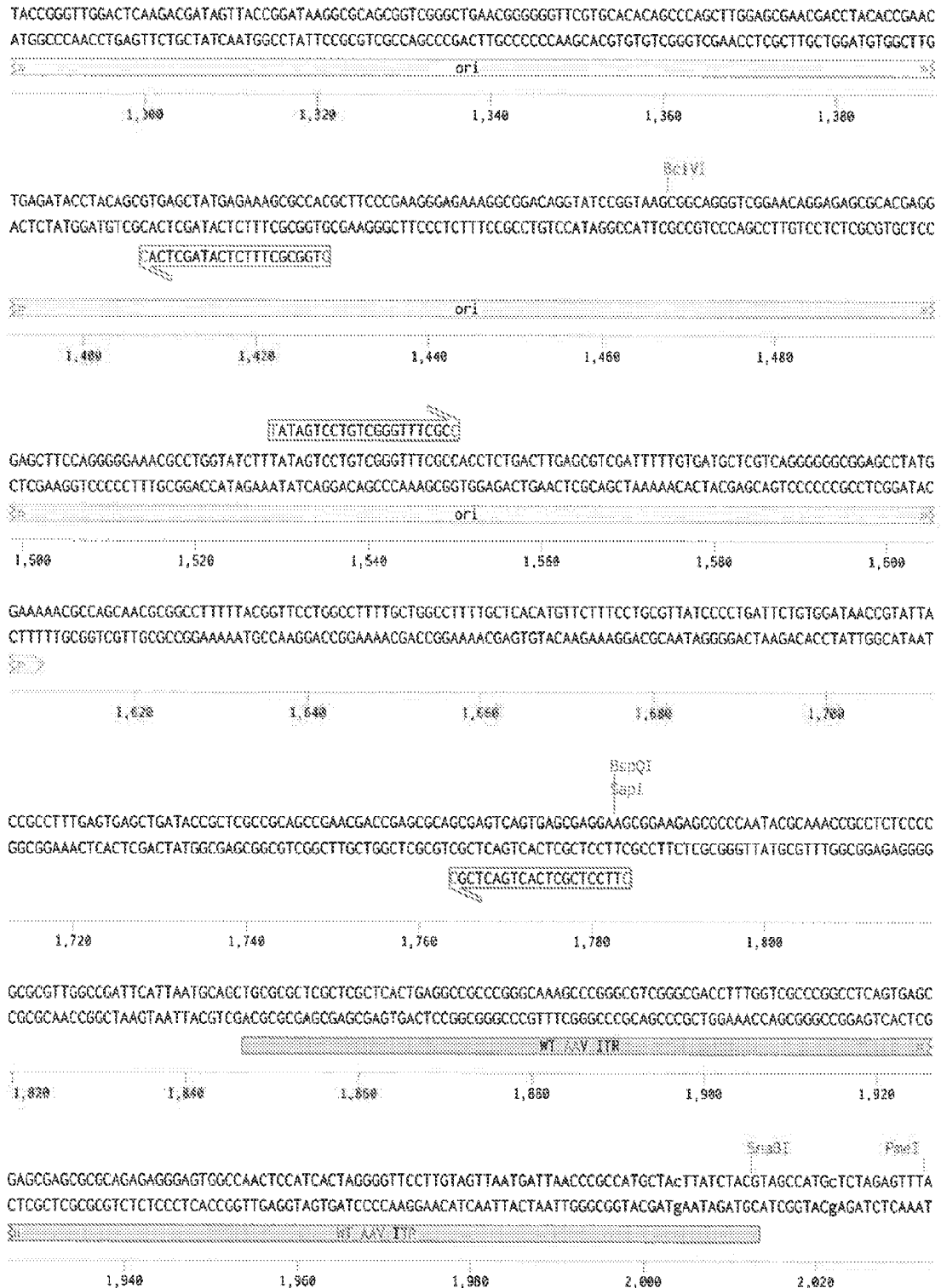


Figure 6D

pAAV.MHCK7.GNE.minIRES-FST344 KanR (8423 bp) (from 2034-2782 bp)

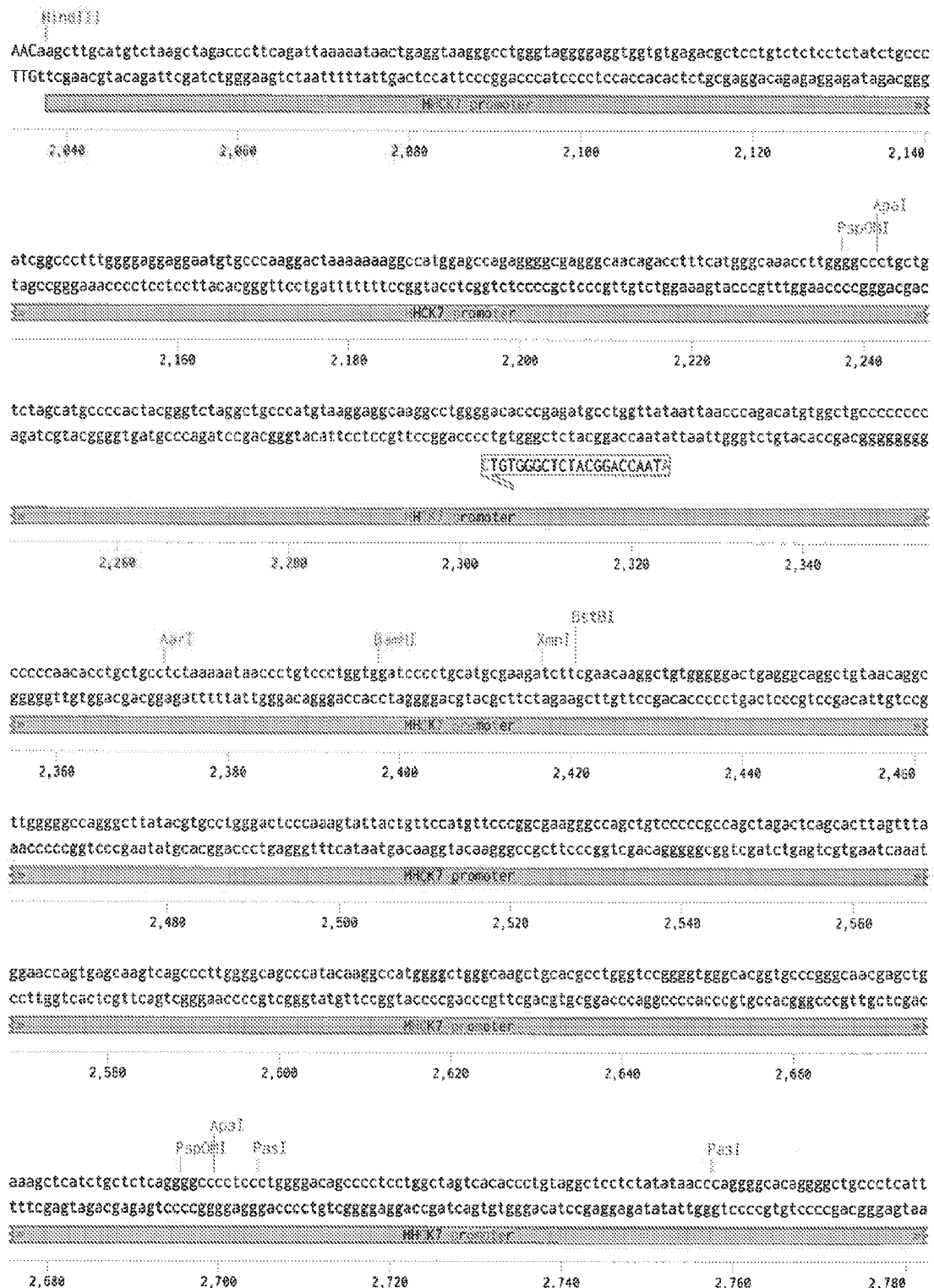


Figure 6E

pAAV.MHCK7.GNE.miniRES-FST344 KanR (8423 bp) (from 2783-3210 bp)

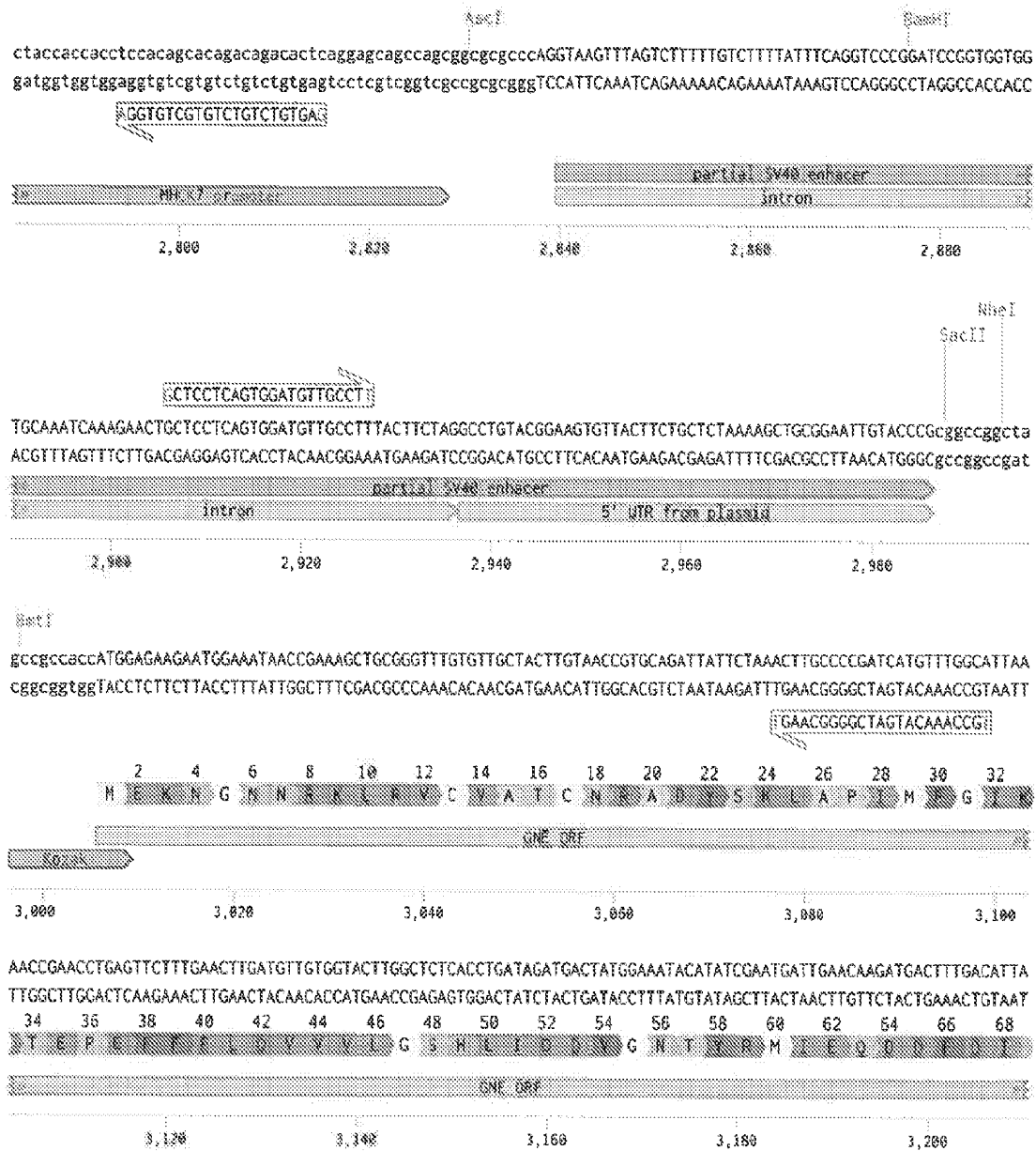


Figure 6F

pAAV.MHCK7.GNE.miniIRES-FST344 KanR (8423 bp) (from 3211-3745 bp)

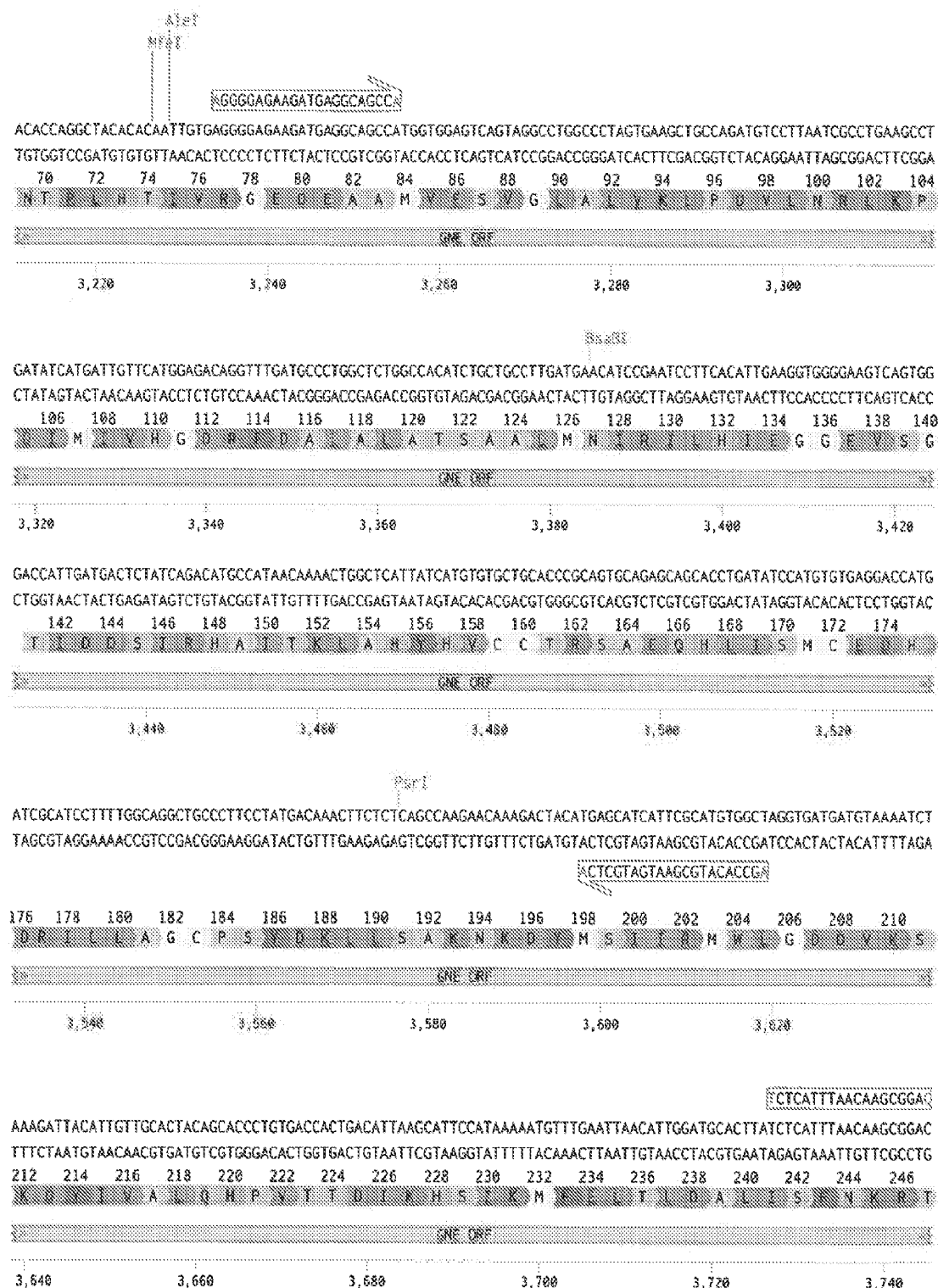


Figure 6G

pAAV.MHCK7.GNE.miniRES-FST344 KanR (8423 bp) (from 3746-4280 bp)

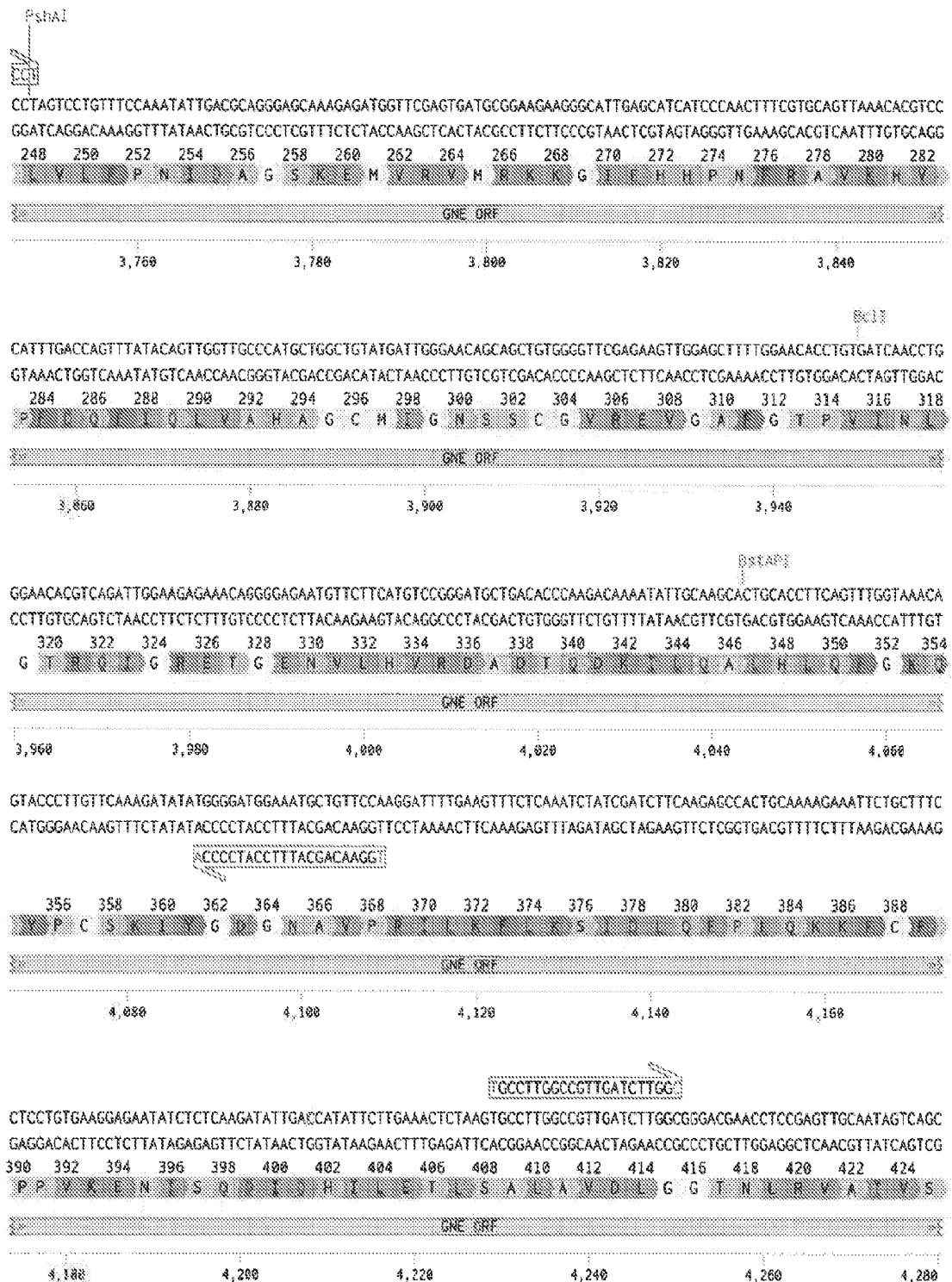


Figure 6H

pAAV.MHCK7.GNE.miniIRES-FST344 KanR (8423 bp) (from 4281-4708 bp)

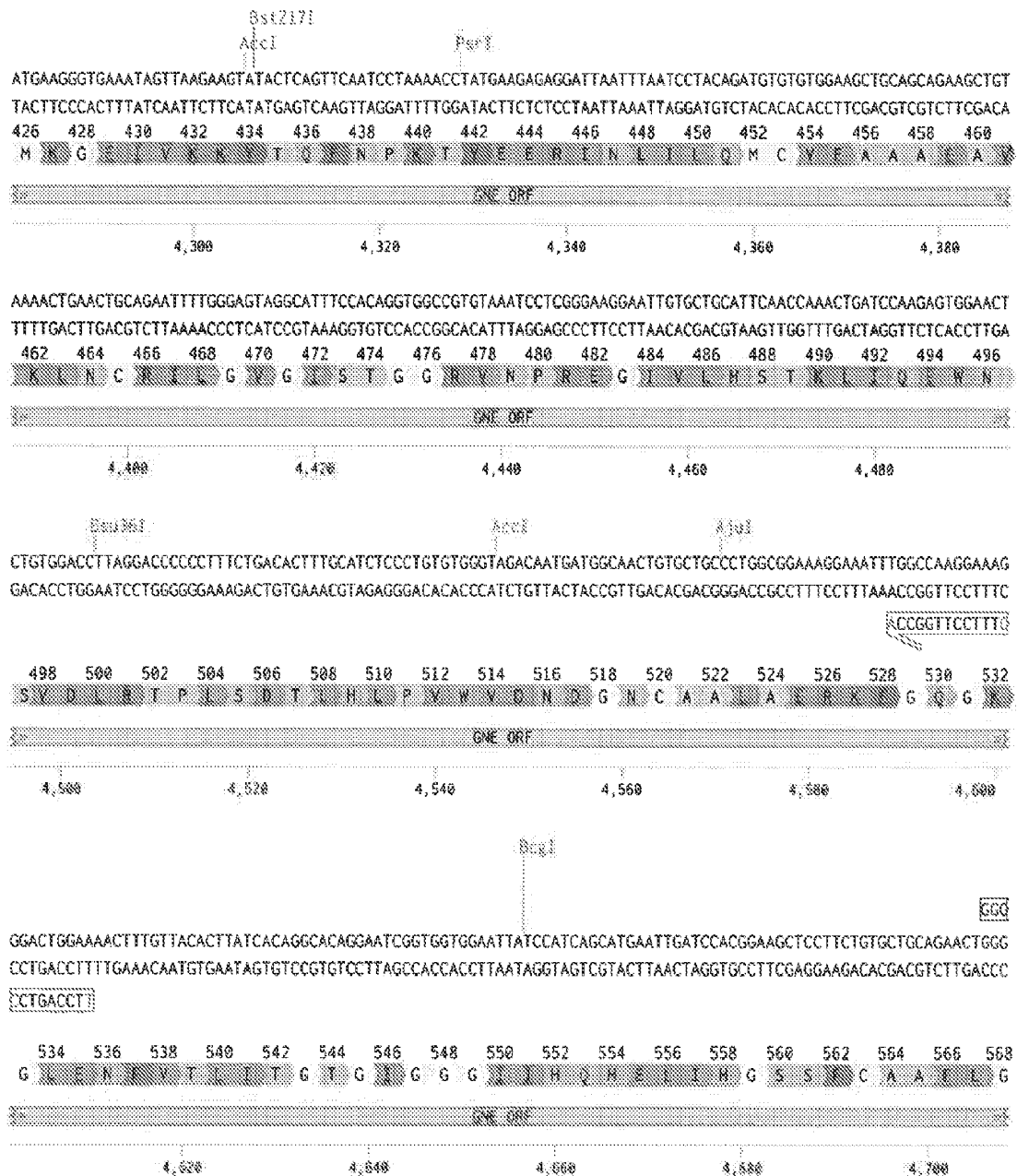


Figure 6j

pAAV.MHCK7.GNE.miniIRES-FST344 KanR (8423 bp) (from 4709-5136 bp)

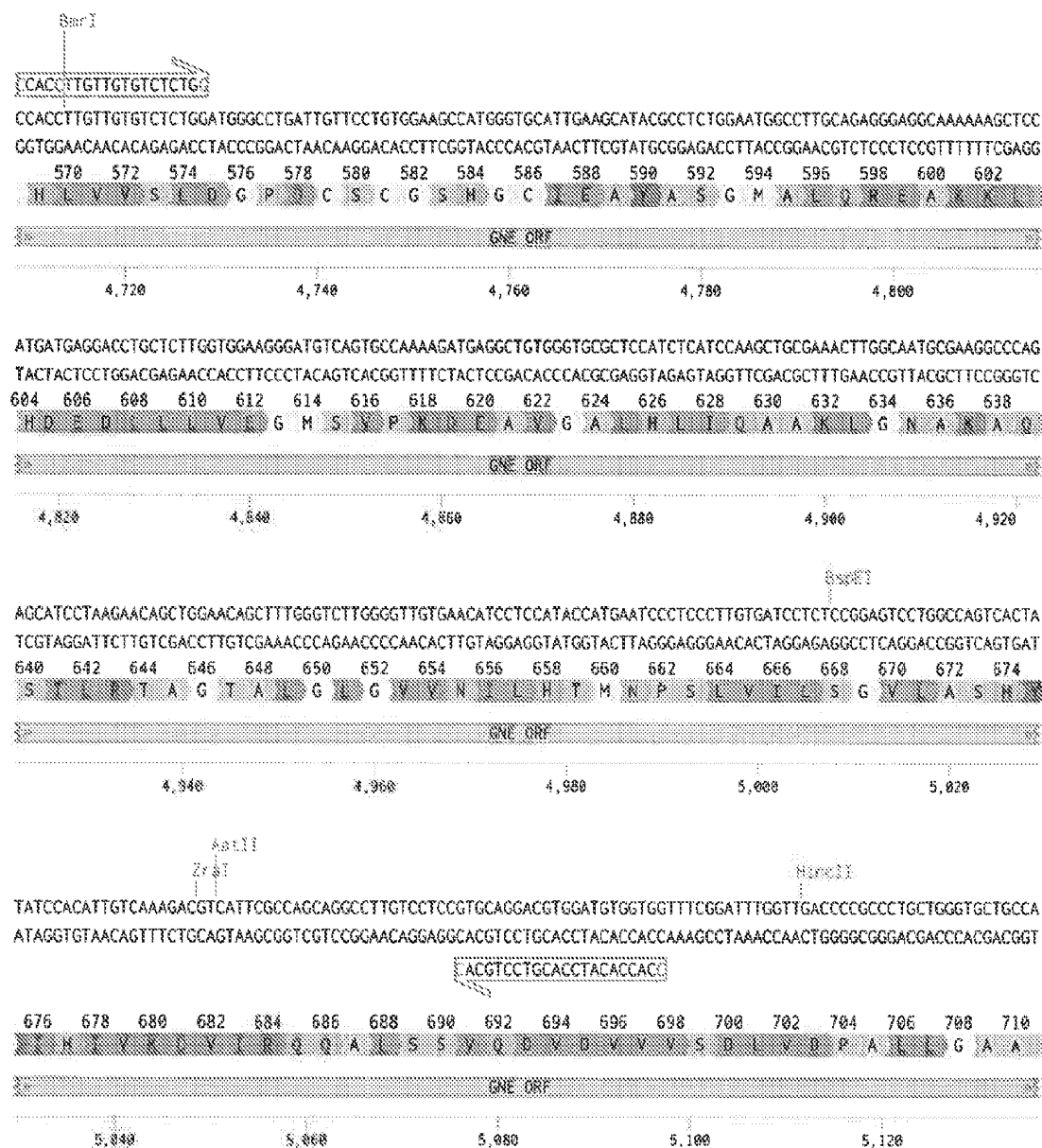


Figure 6J

pAAV.MHCK7.GNE.miniRES-FST344 KanR (8423 bp) (from 5137-5671 bp)

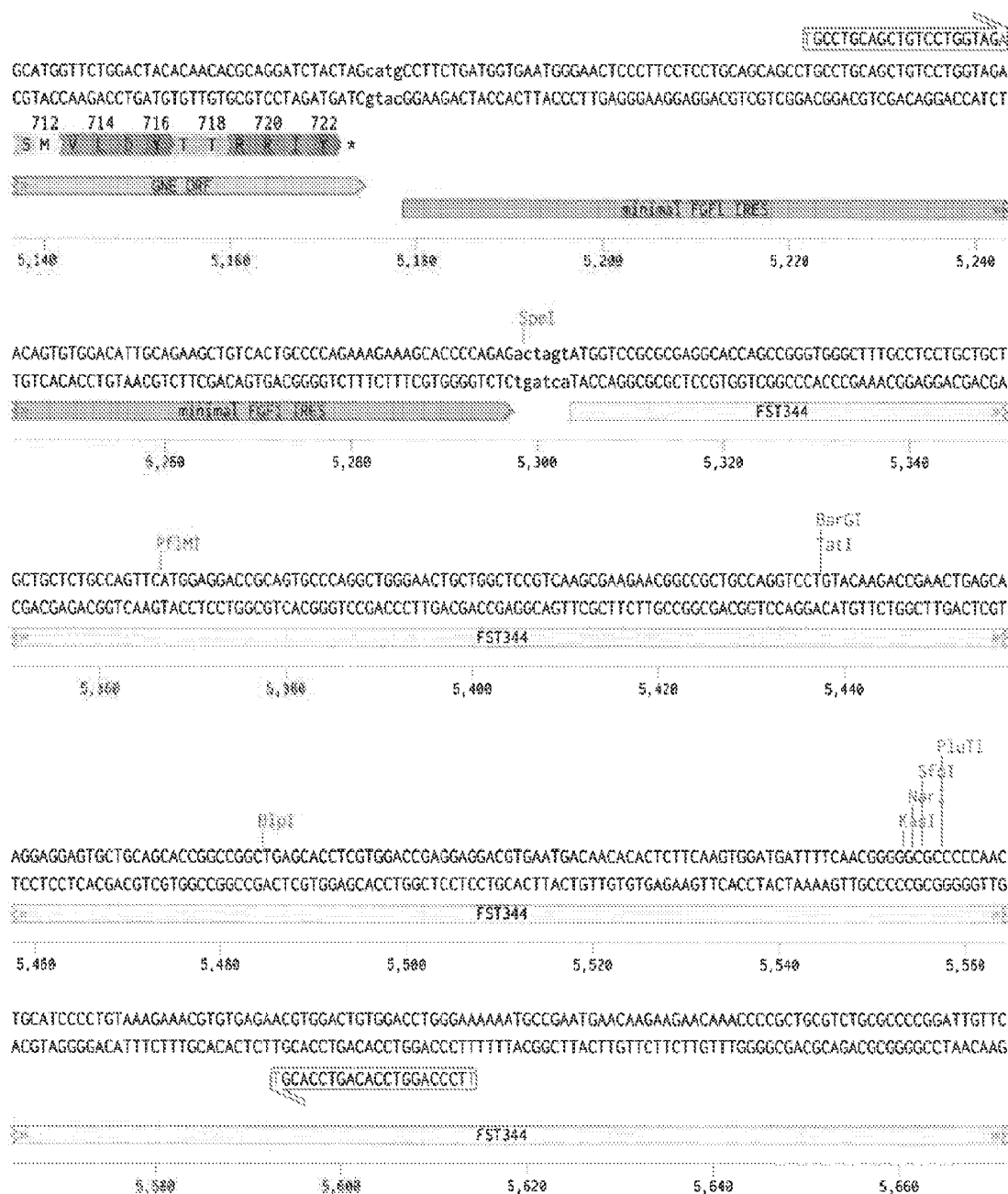


Figure 6K

pAAV.MHCK7.GNE.miniRES-FST344 KanR (8423 bp) (from 5672-6313 bp)

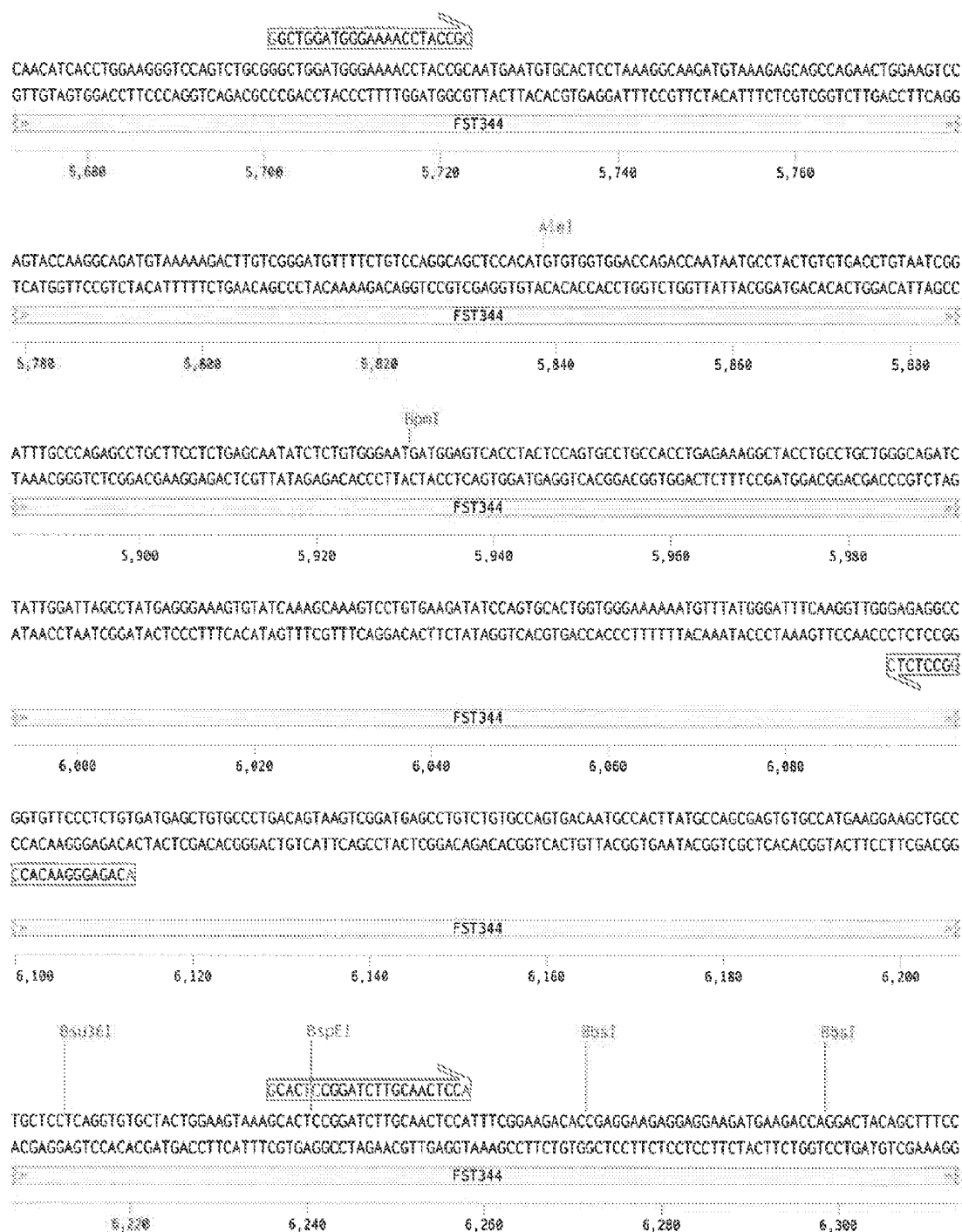


Figure 6L

pAAV.MHCK7.GNE.miniIRES-F5T344 KanR (8423 bp) (from 6314-7062 bp)

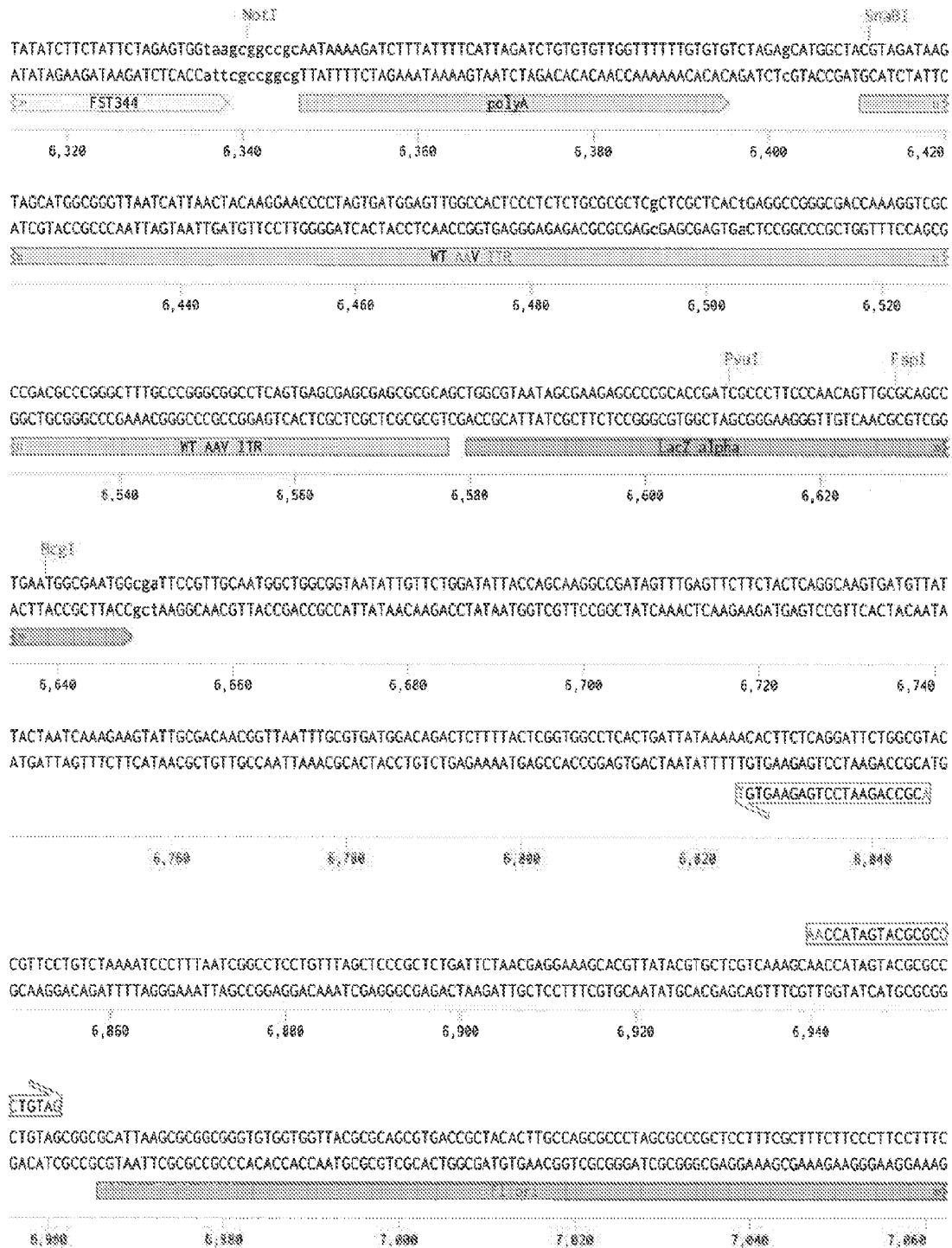


Figure 6 M

pAAV.MHCK7.GNE.miniRES-FST344 KanR (8423 bp) (from 7063-7918 bp)

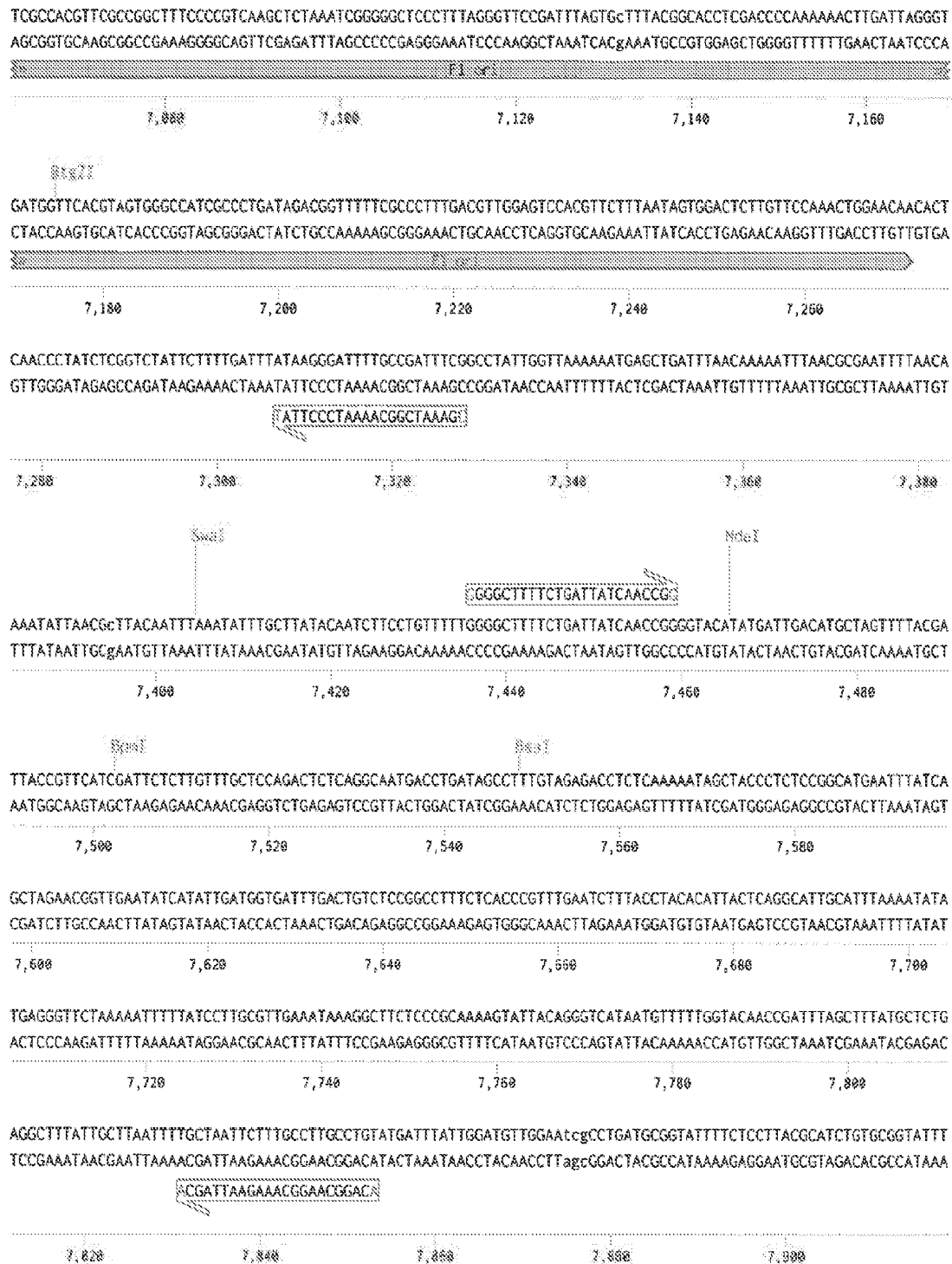


Figure 6N

pAAV.MHCK7.GNE.miniIRES-FST344 KanR (8423 bp) (from 7919-8423 bp)

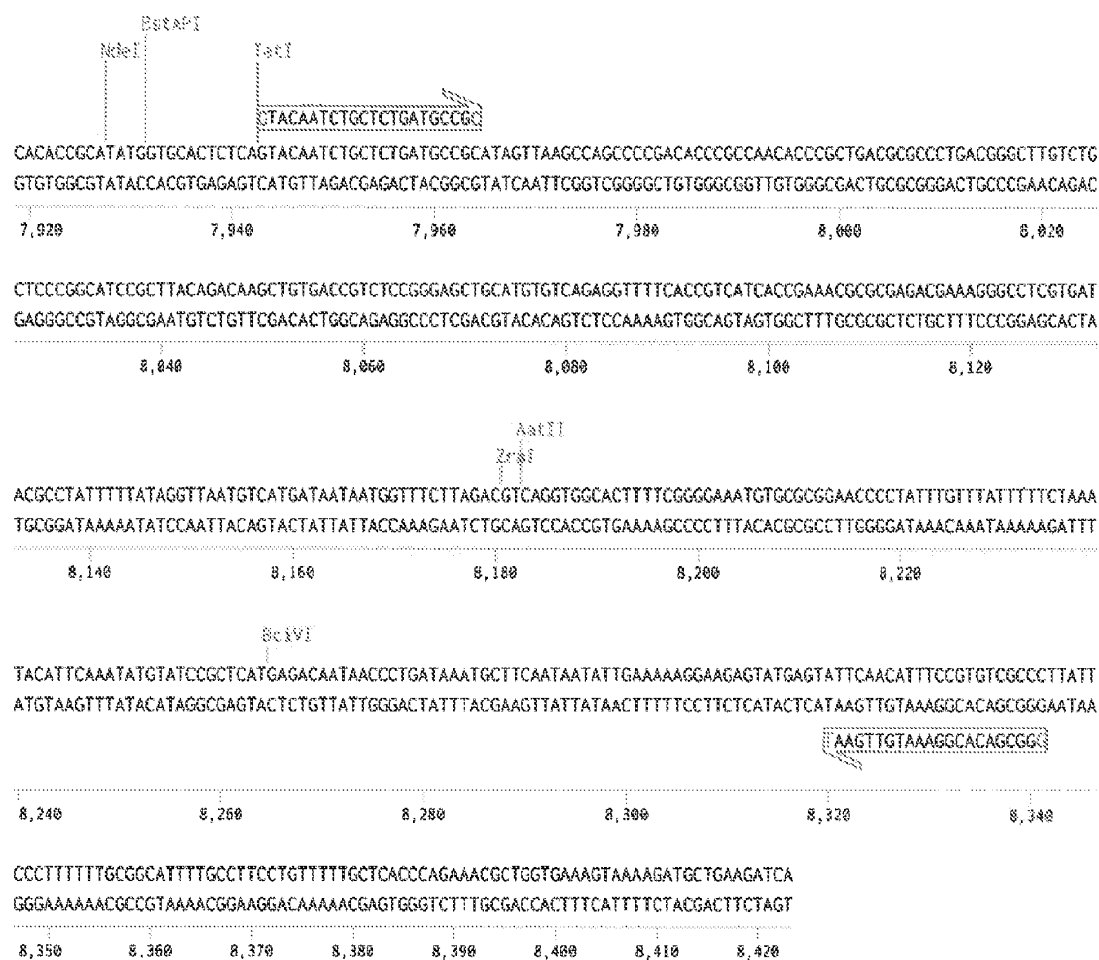


Figure 7A

(from 1-535 bp)

pAAV.MHCK7.GNE.minIRES.sHB-IGF1 KanR (7926 bp)

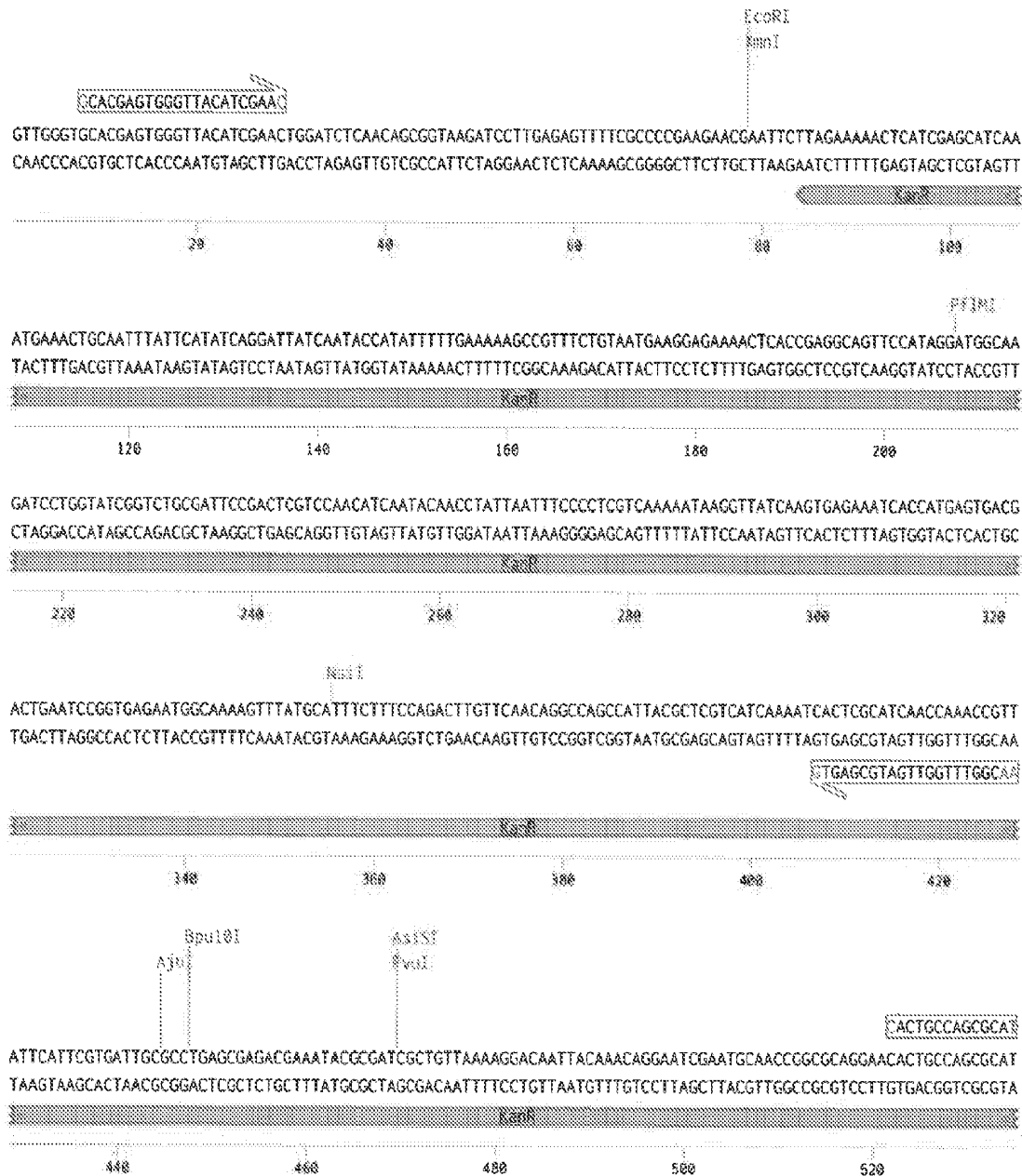
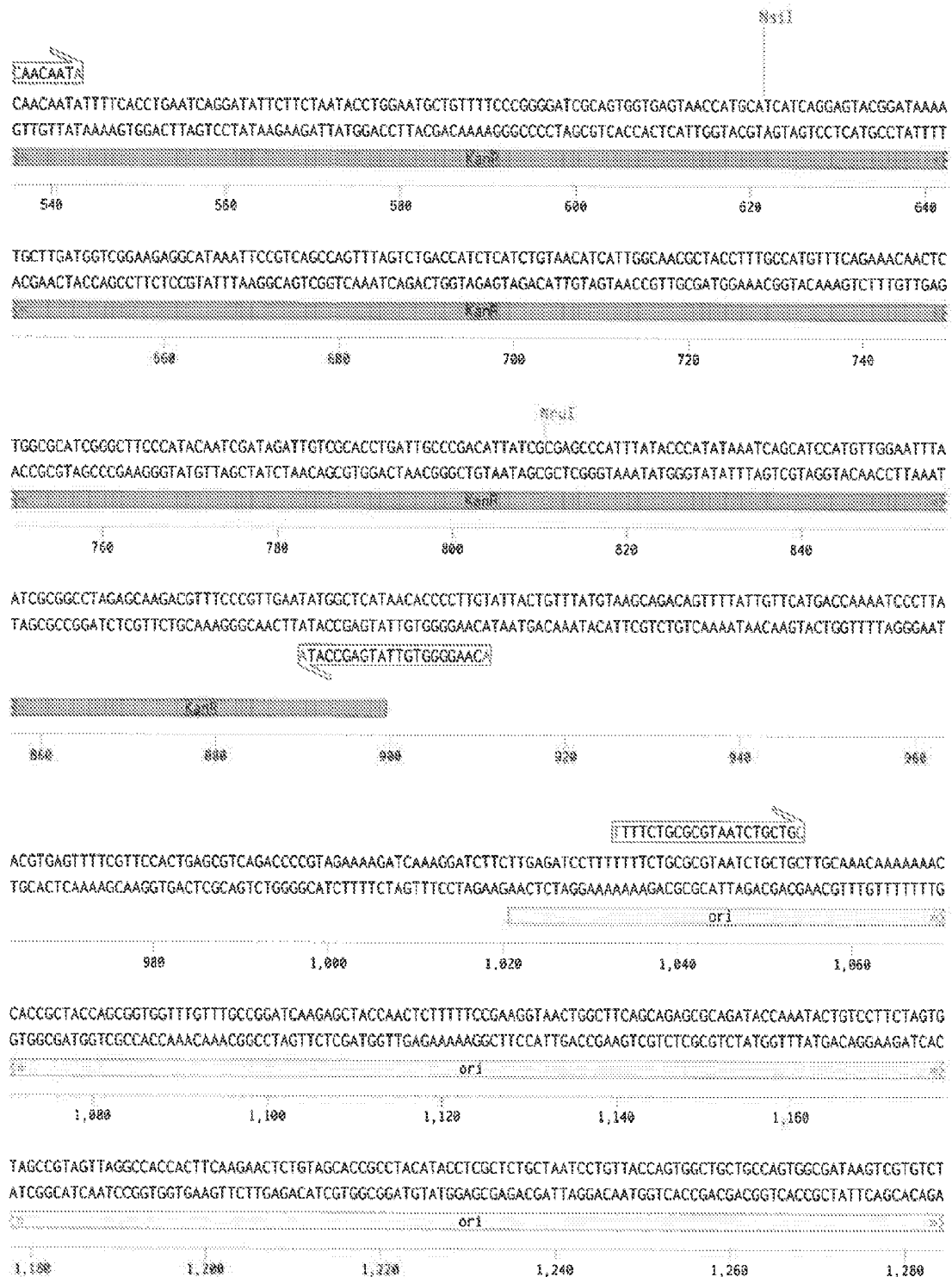


Figure 7B

pAAV.MHCK7.GNE.miniIRES.sHB-IGF1 KanR (7926 bp) (from 536-1284 bp)



pAAV.MHCK7.GNE.miniRES.shB-IGF1 KanR (7926 bp) (from 1285-1926 bp)

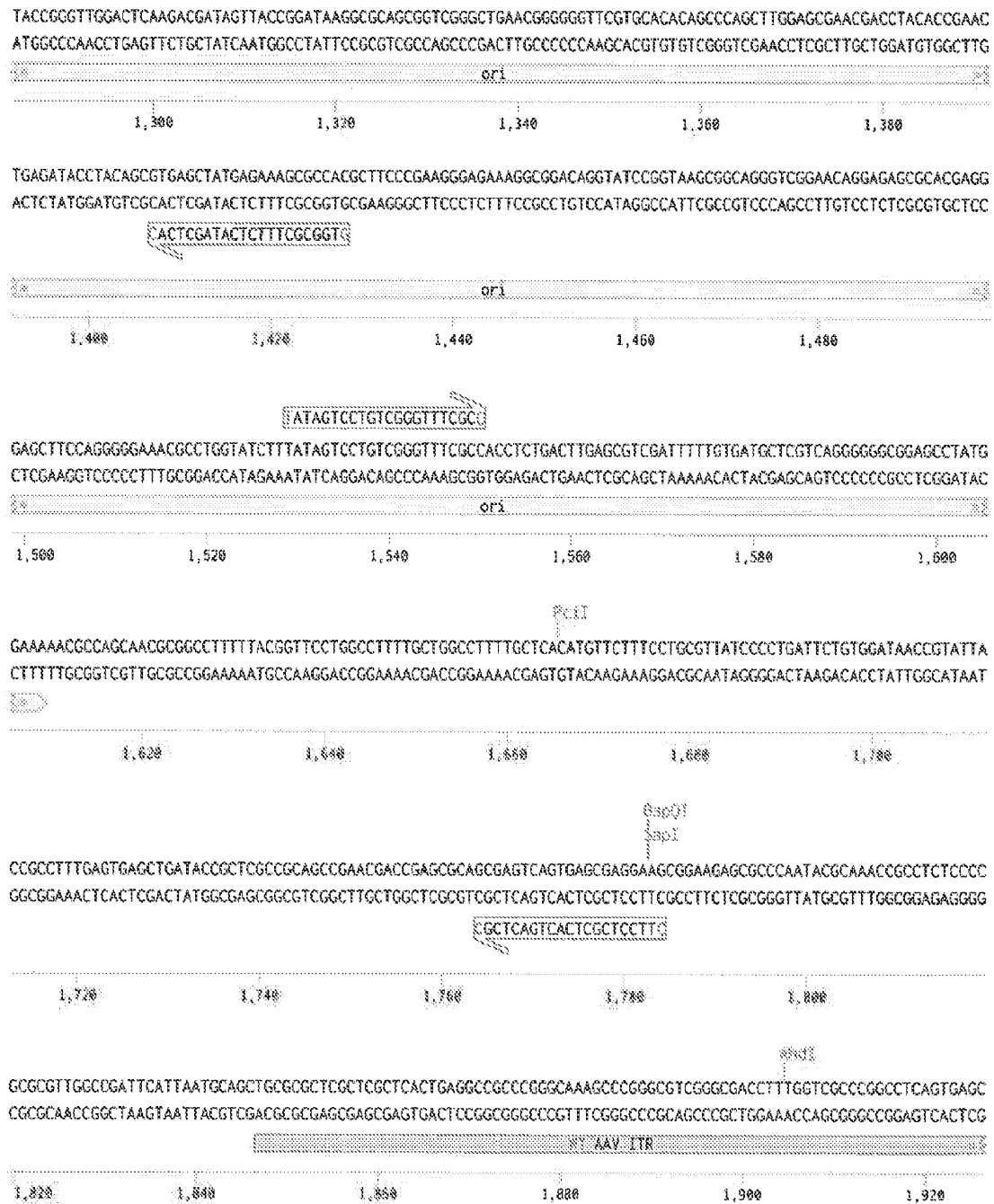


Figure 7D

pAAV.MHCK7.GNE.miniIRES.shB-IGF1 KanR (7926 bp) (from 1927-2568 bp)

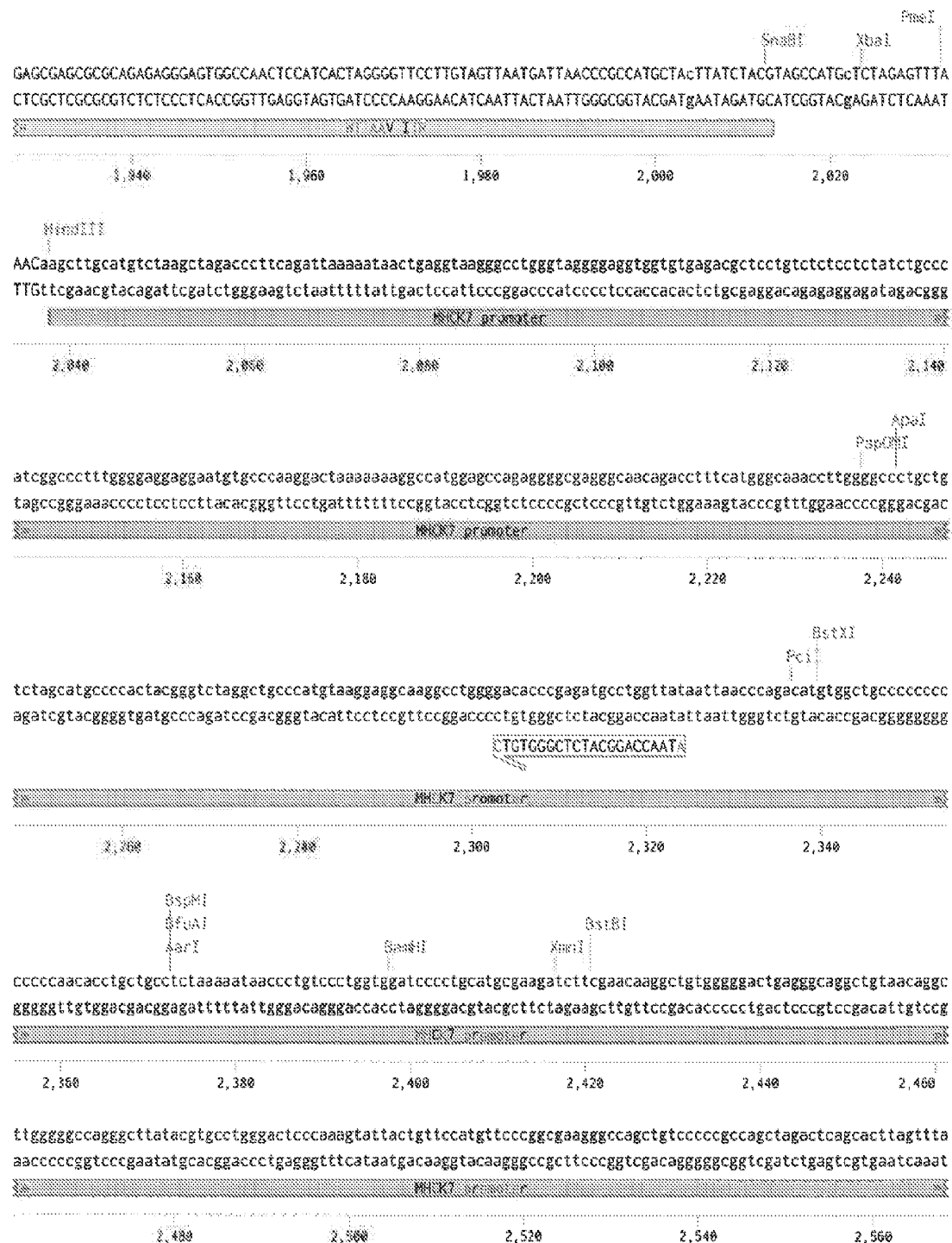


Figure 7E

pAAV.MHCK7.GNE.miniRES.shB-IGF1 KanR (7926 bp) (from 2569-3103 bp)

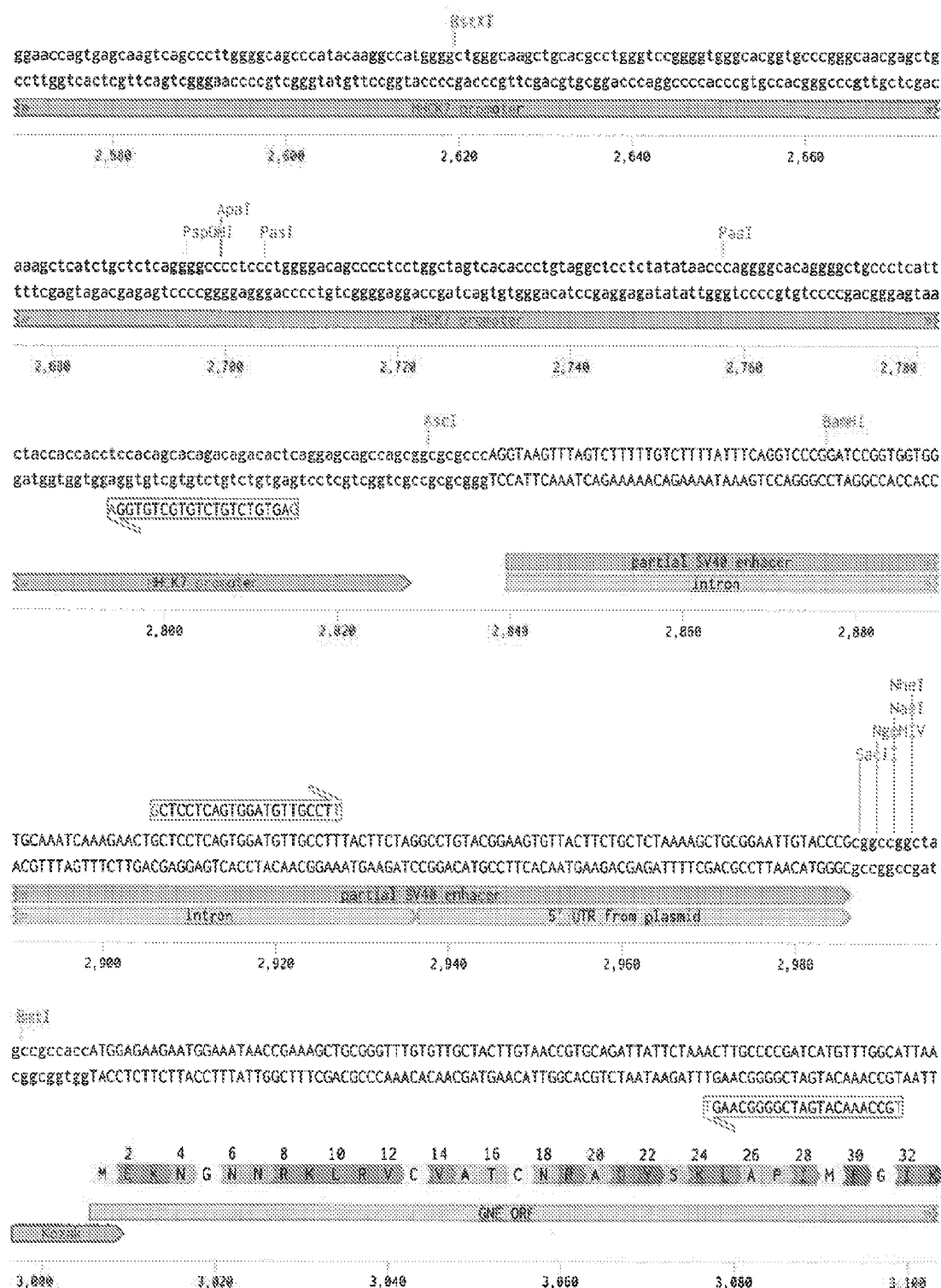


Figure 7F

pAAV.MHCK7.GNE.miniRES.sHB-IGF1 KanR (7926 bp) (from 3104-3638 bp)

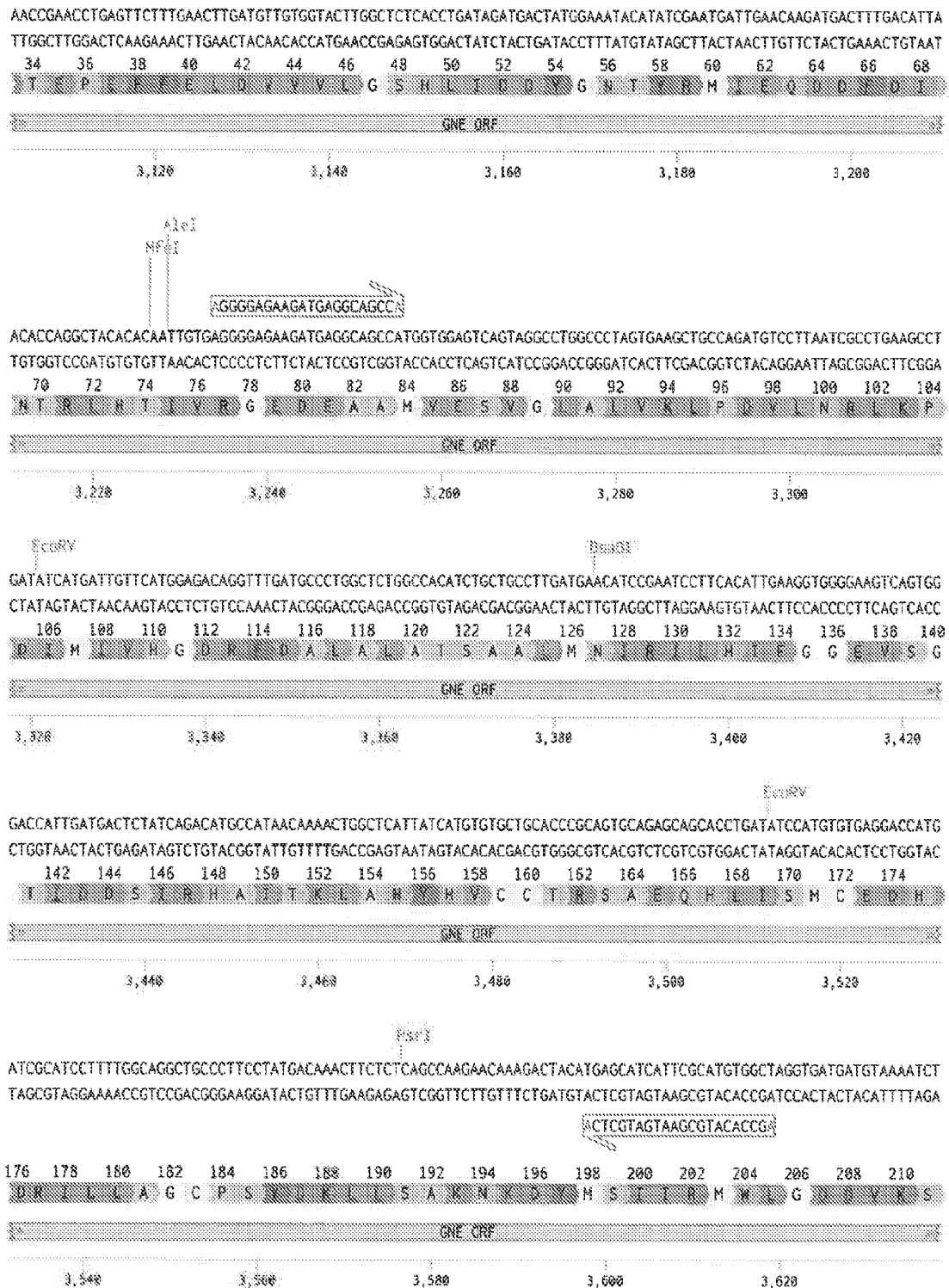


Figure 7G

pAAV.MHCK7.GNE.miniRES.sHB-IGF1 KanR (7926 bp) (from 3639-4066 bp)

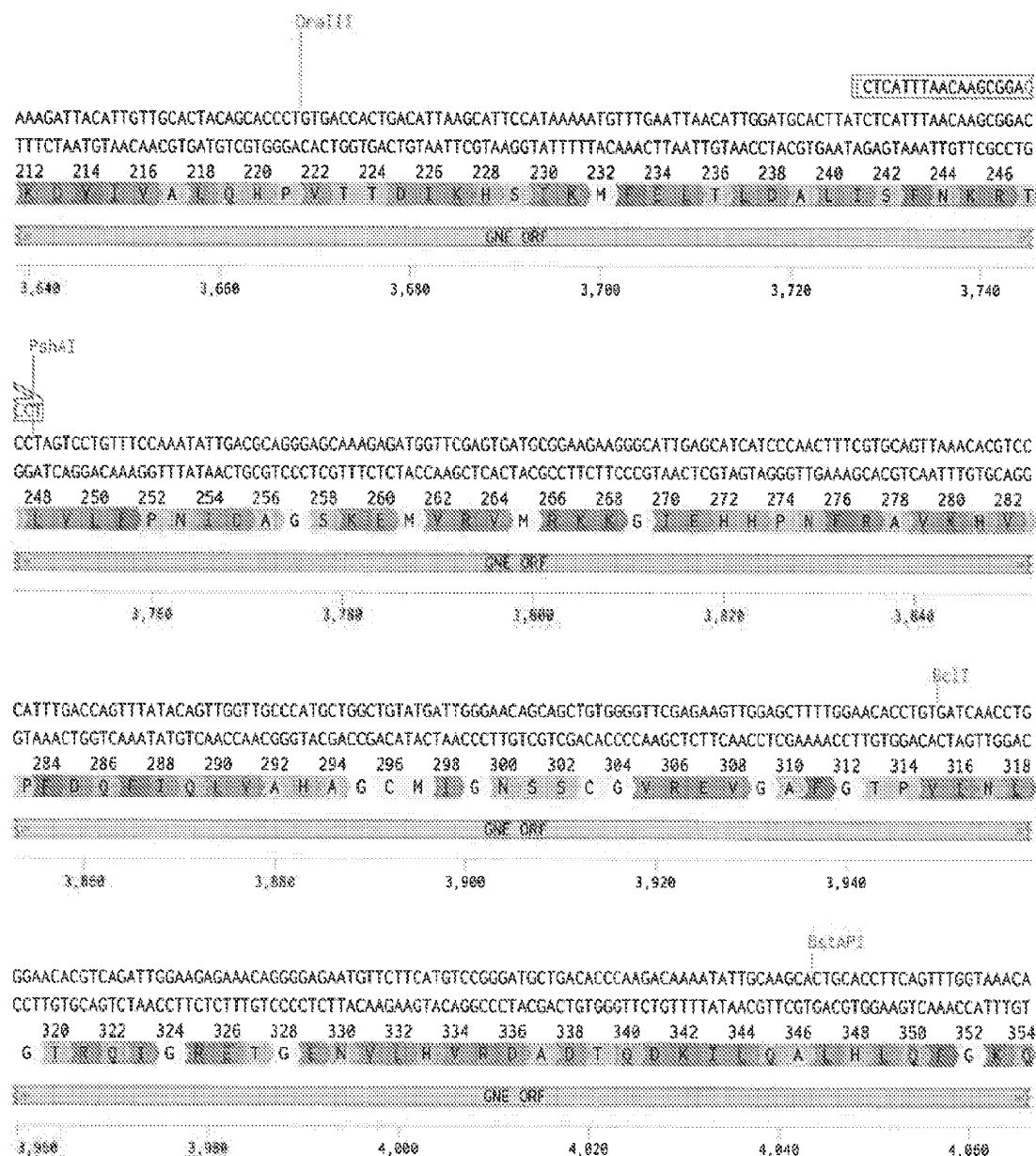


Figure 7H

pAAV.MHCK7.GNE.miniRES.sHB-IGF1 KanR (7926 bp) (from 4067-4601 bp)

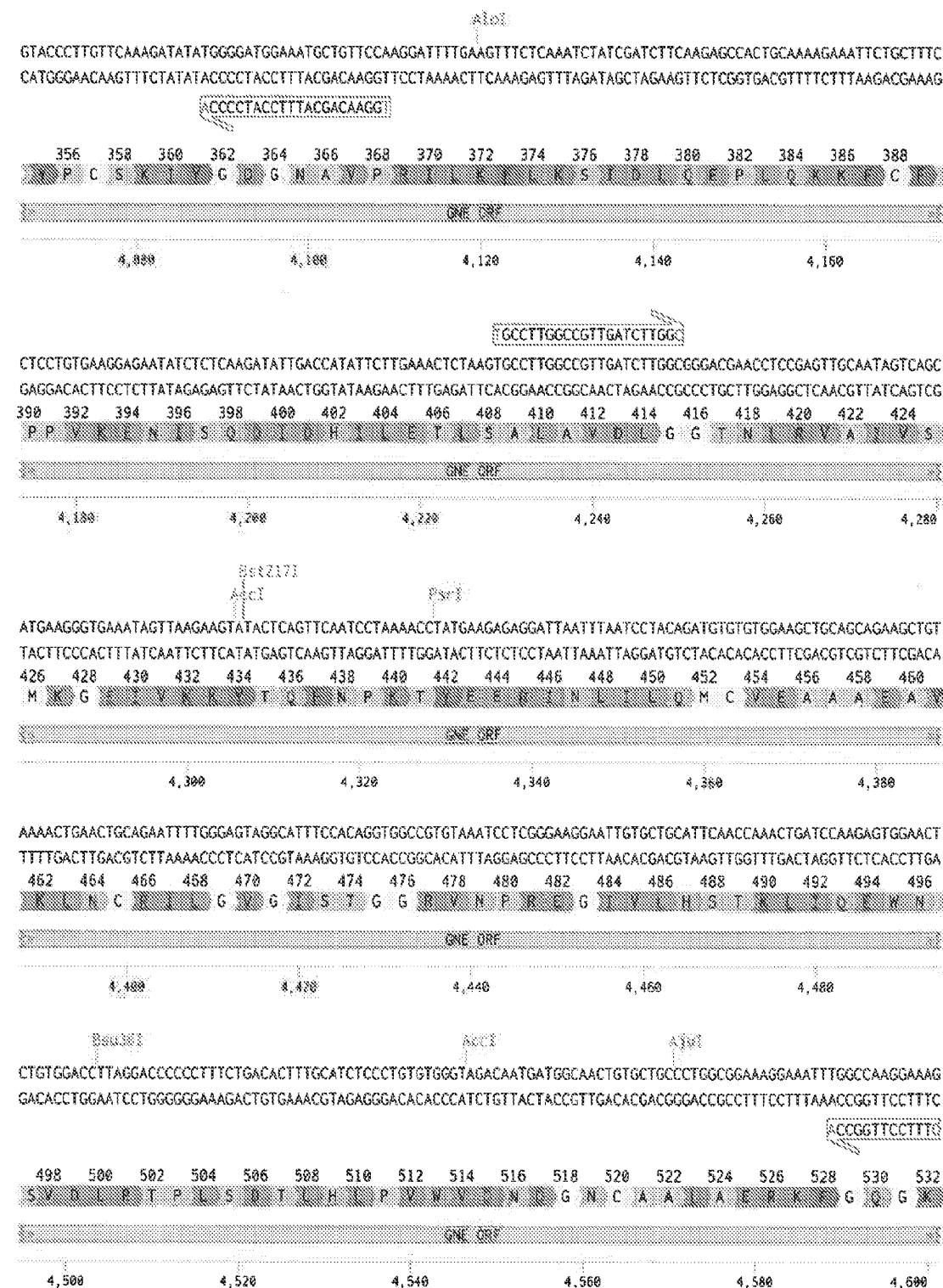


Figure 7I

pAAV.MHCK7.GNE.miniRES.shB-IGF1 KanR (7926 bp) (from 4602-5029 bp)

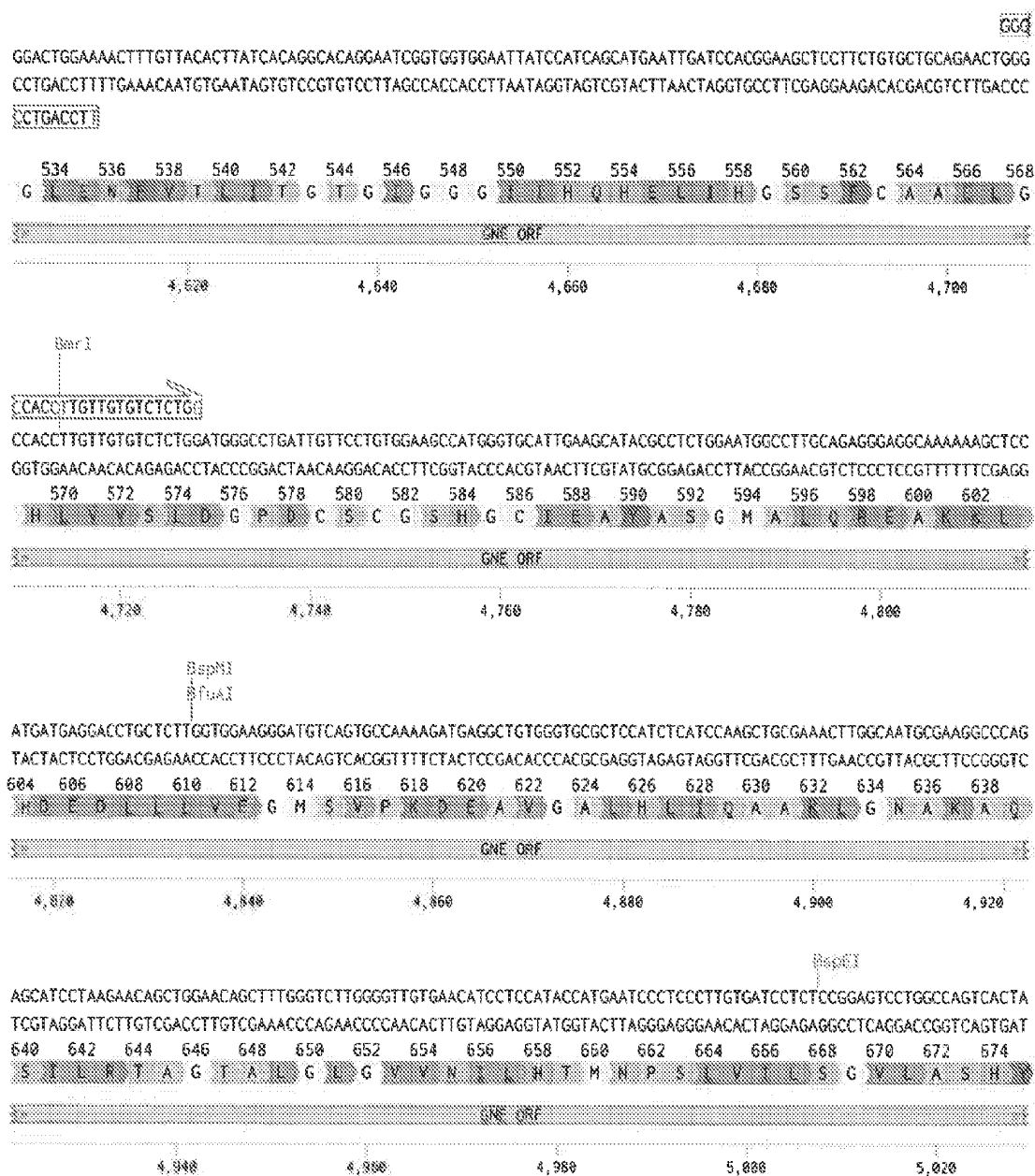


Figure 7J

pAAV.MHCK7.GNE.miniIRES.sHB-IGF1 KanR (7926 bp) (from 5030-5564 bp)

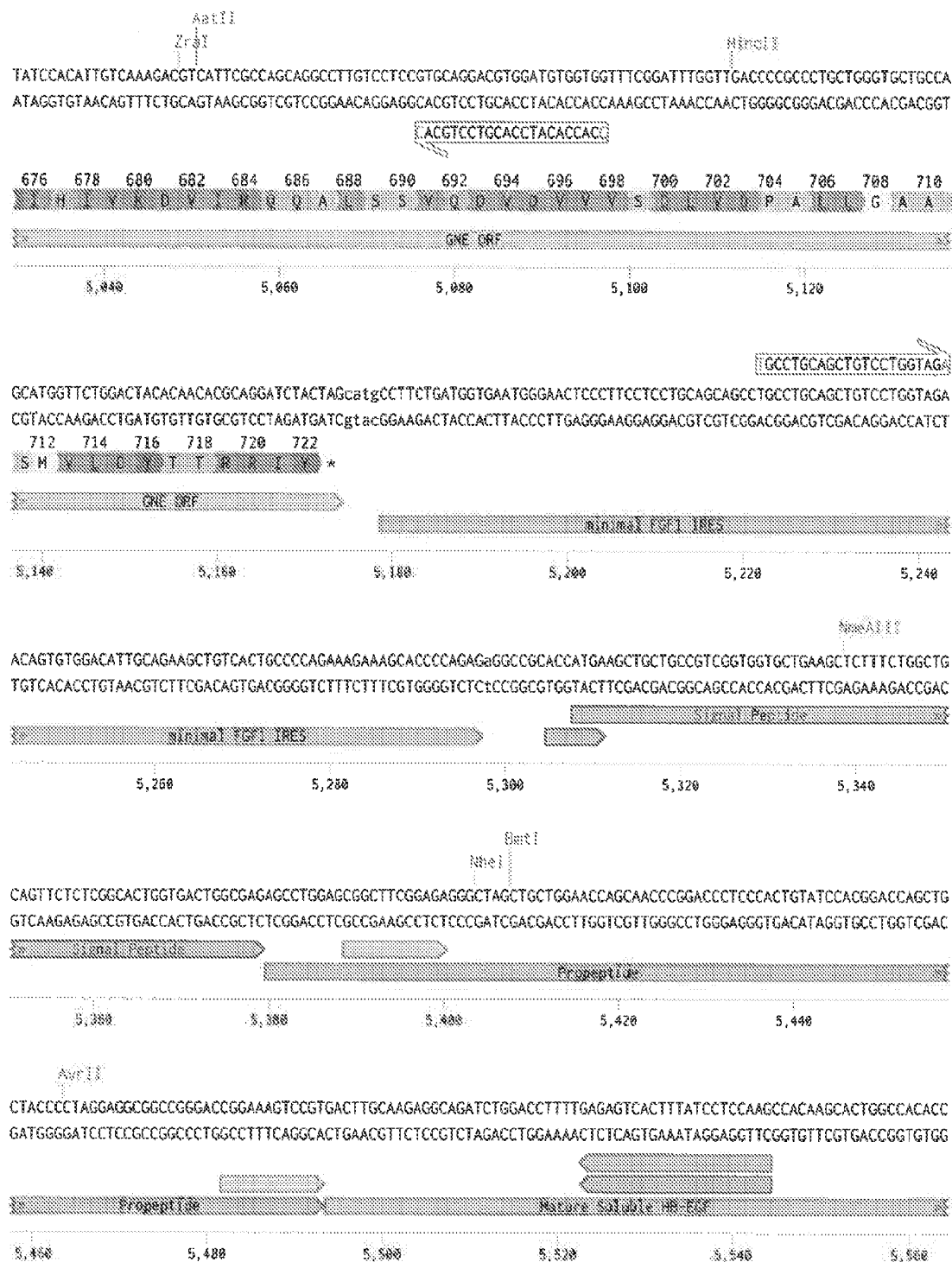


Figure 7K

pAAV.MHCK7.GNE.miniRES.sHB-IGF1 KanR (7926 bp) (from 5565-6099 bp)

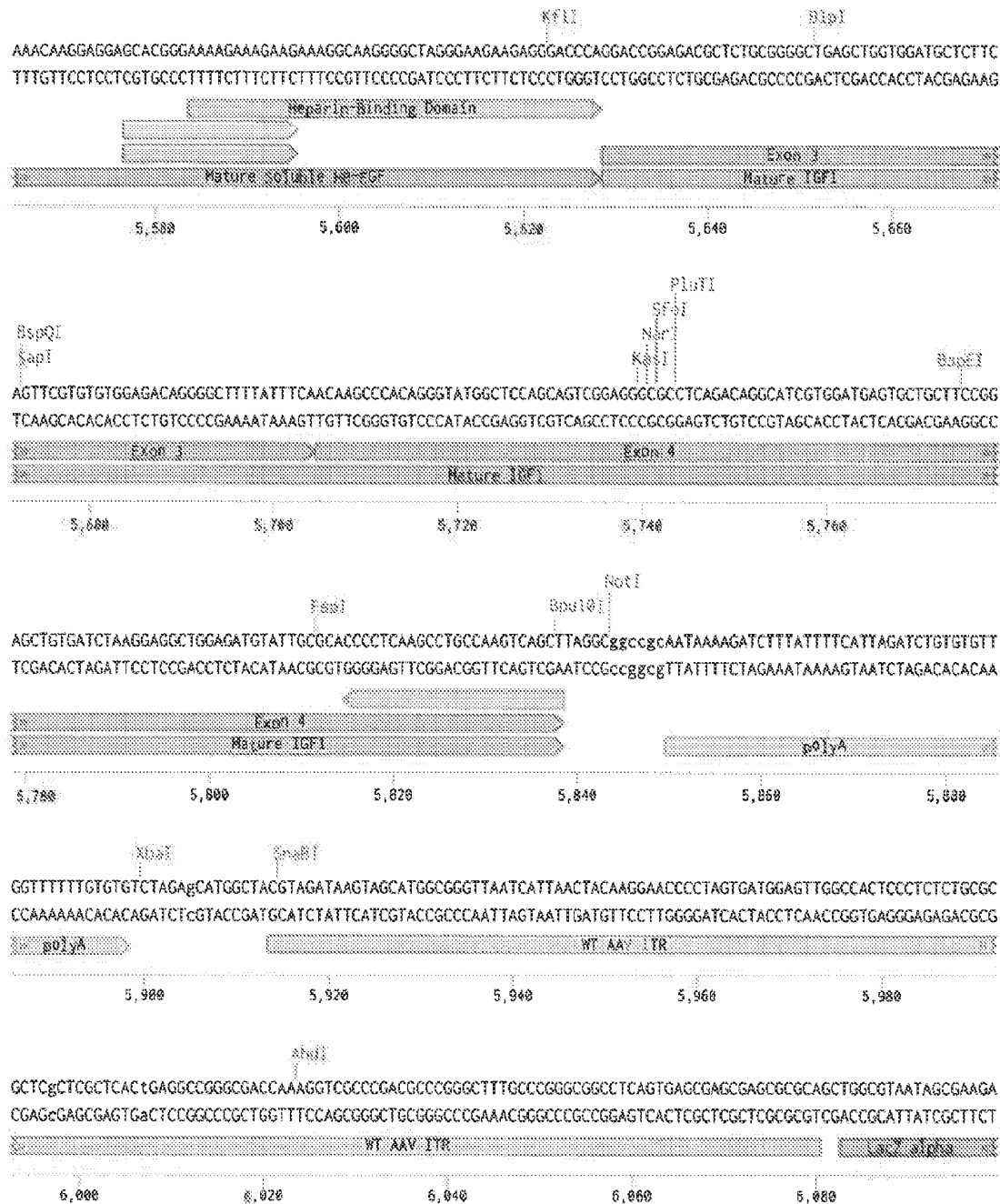


Figure 7L

pAAV.MHCK7.GNE.miniIRE5.sHB-IGF1 KanR (7926 bp) (from 6100-6848 bp)

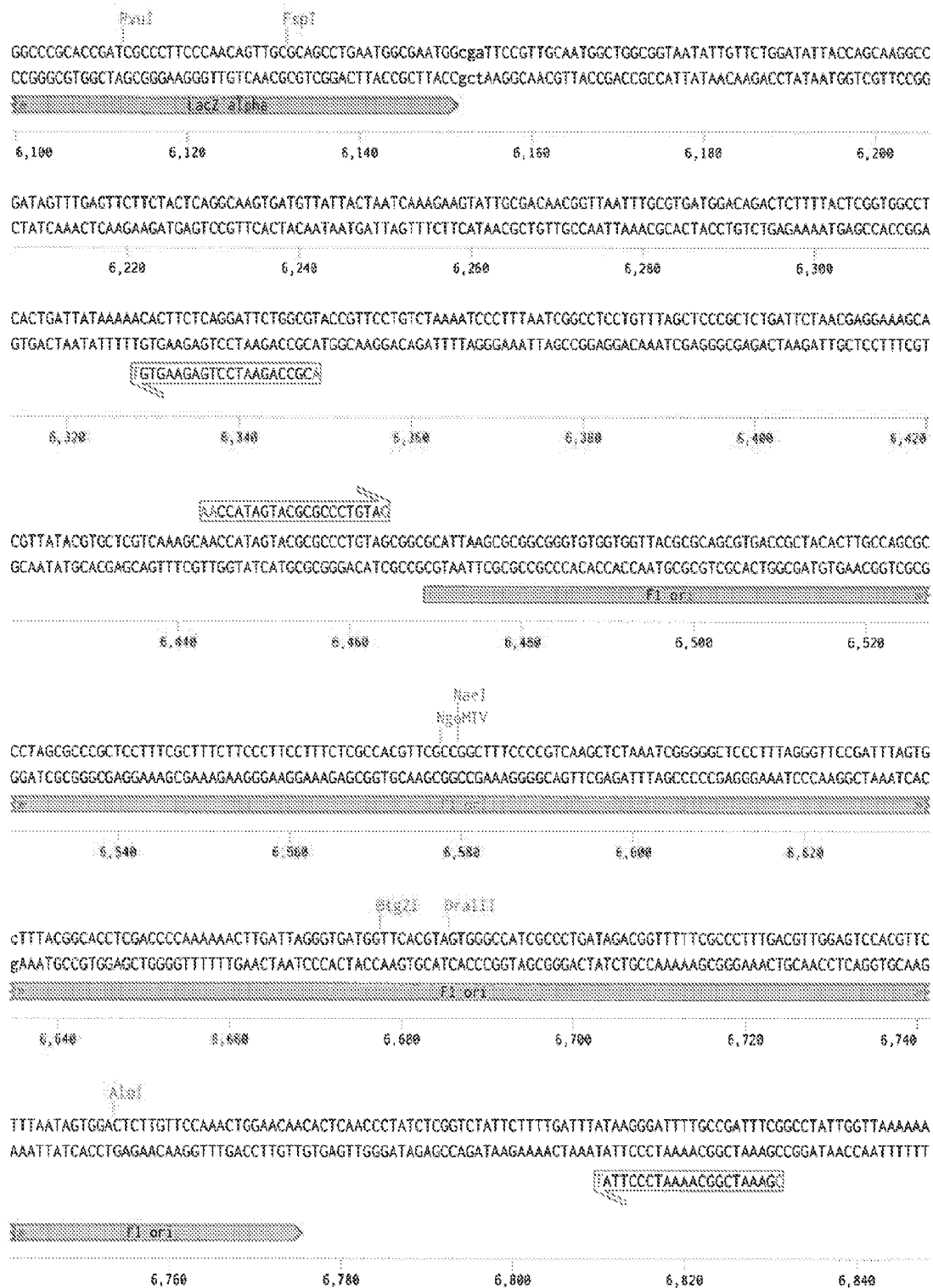


Figure 7M

pAAV.MHCK7.GNE.miniRES.SHB-IGF1 KanR (7926 bp) (from 6849-7597 bp)

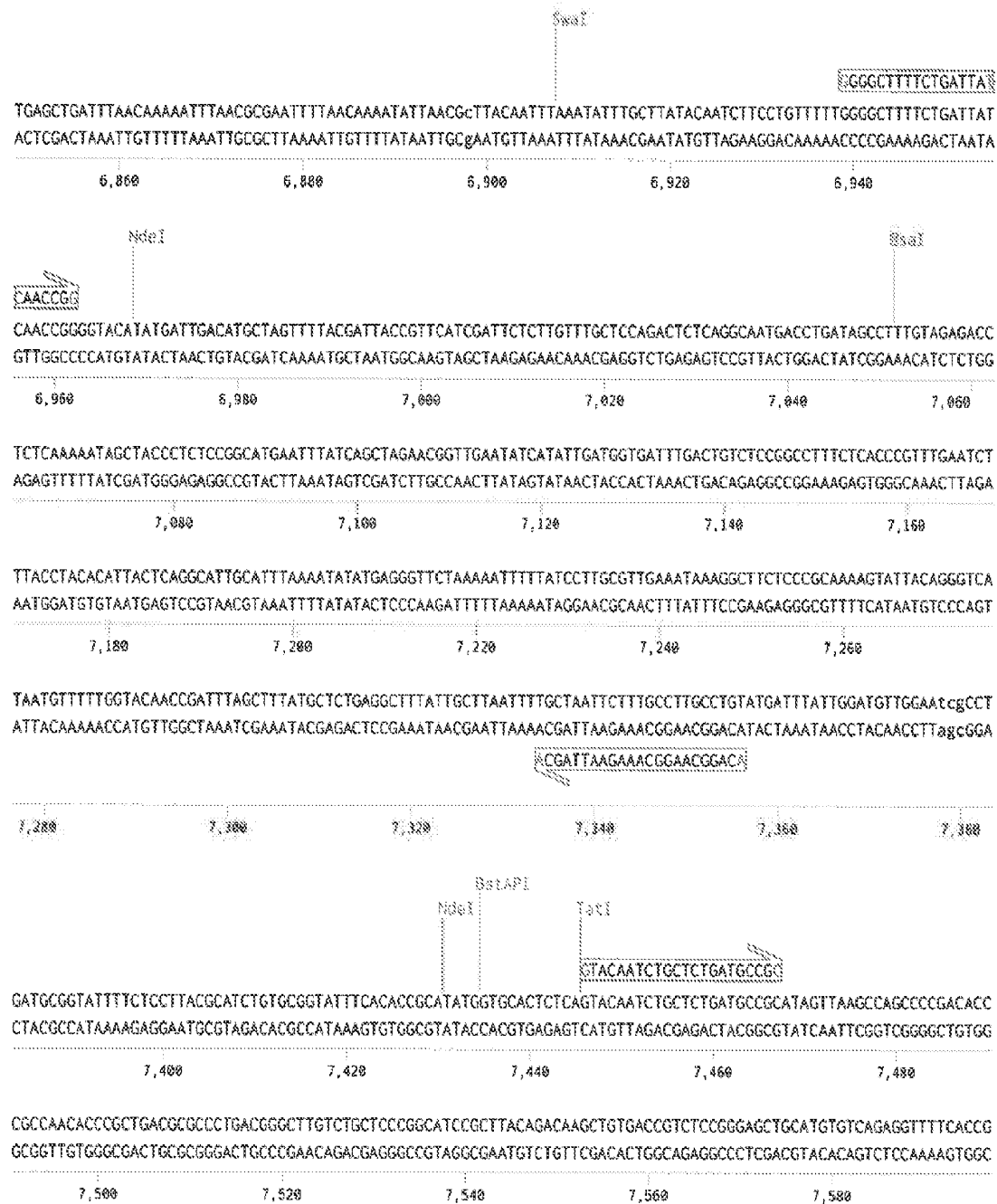


Figure 7N

pAAV.MHCK7.GNE.miniRES.sHB-IGF1 KanR (7926 bp) (from 7598-7926 bp)

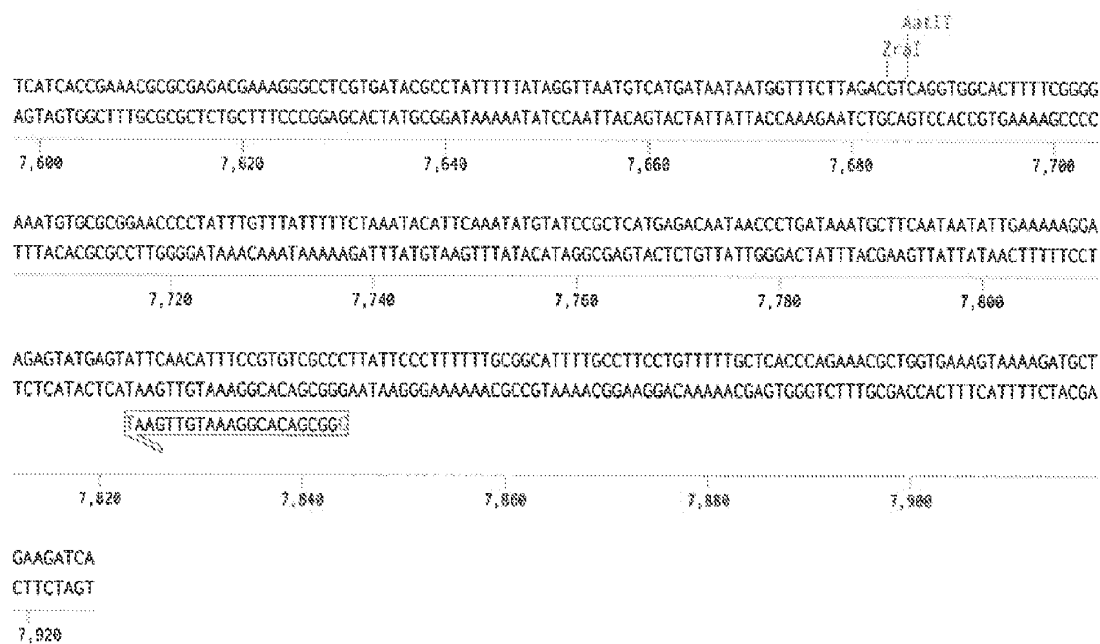
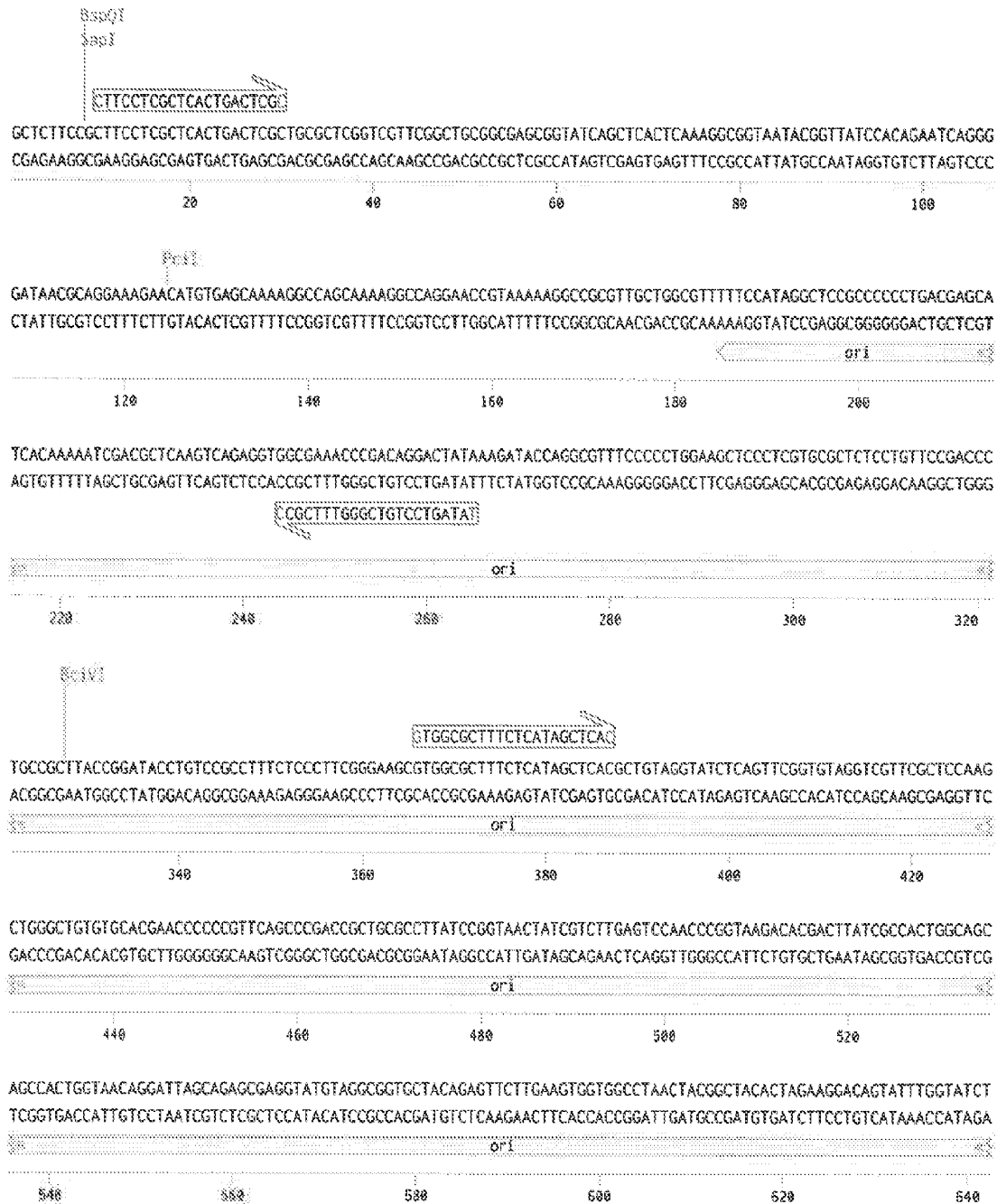


Figure 8A

(from 1-642 bp)

NS pAAV.CMV.GNE.IRES.FST344 KanR (8484 bp)



NS pAAV.CMV.GNE.IRES.FST344 KanR (8484 bp) (from 643-1284 bp)

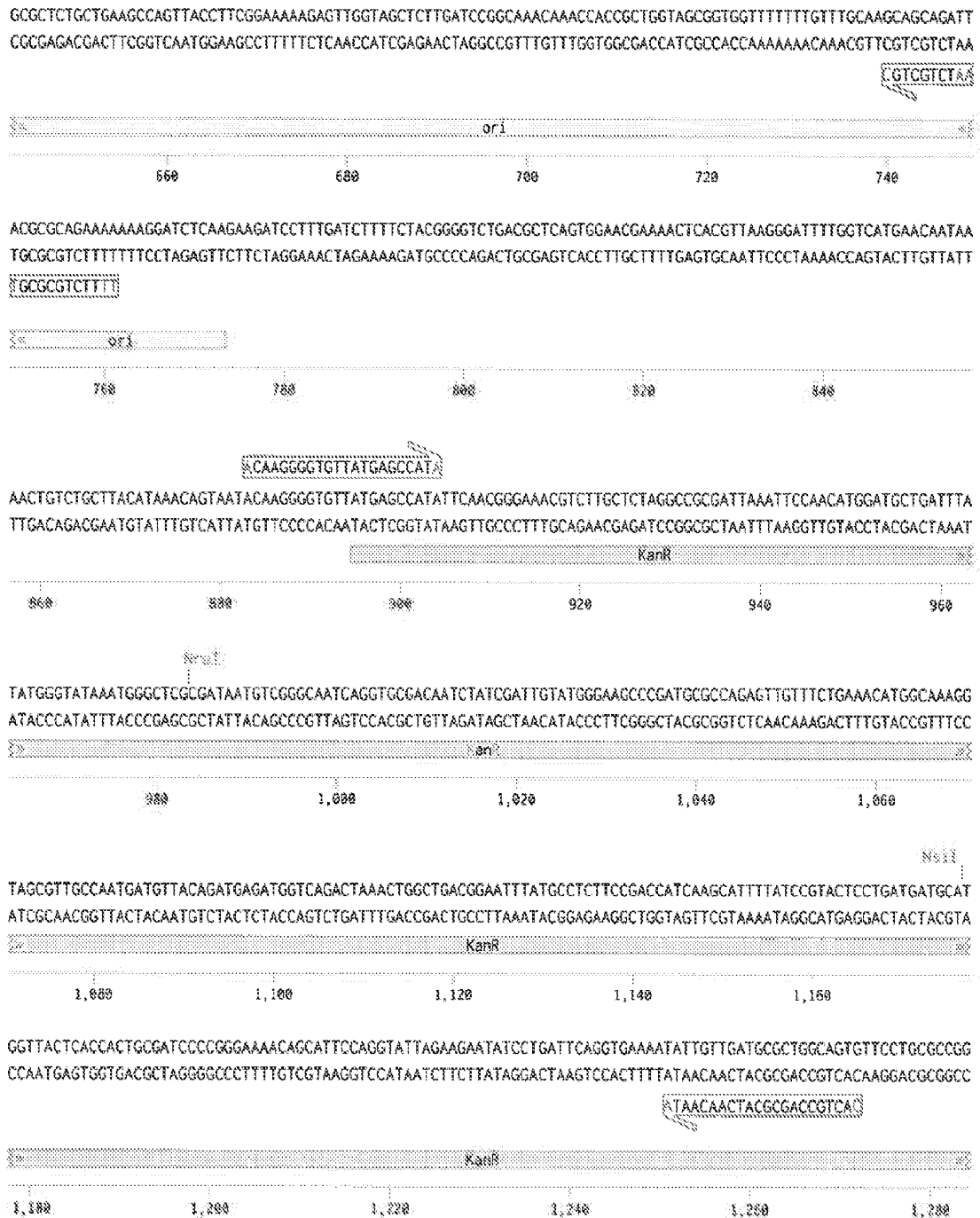


Figure 8C

NS pAAV.CMV.GNE.IRES.FST344 KanR (8484 bp) (from 1285-1926 bp)

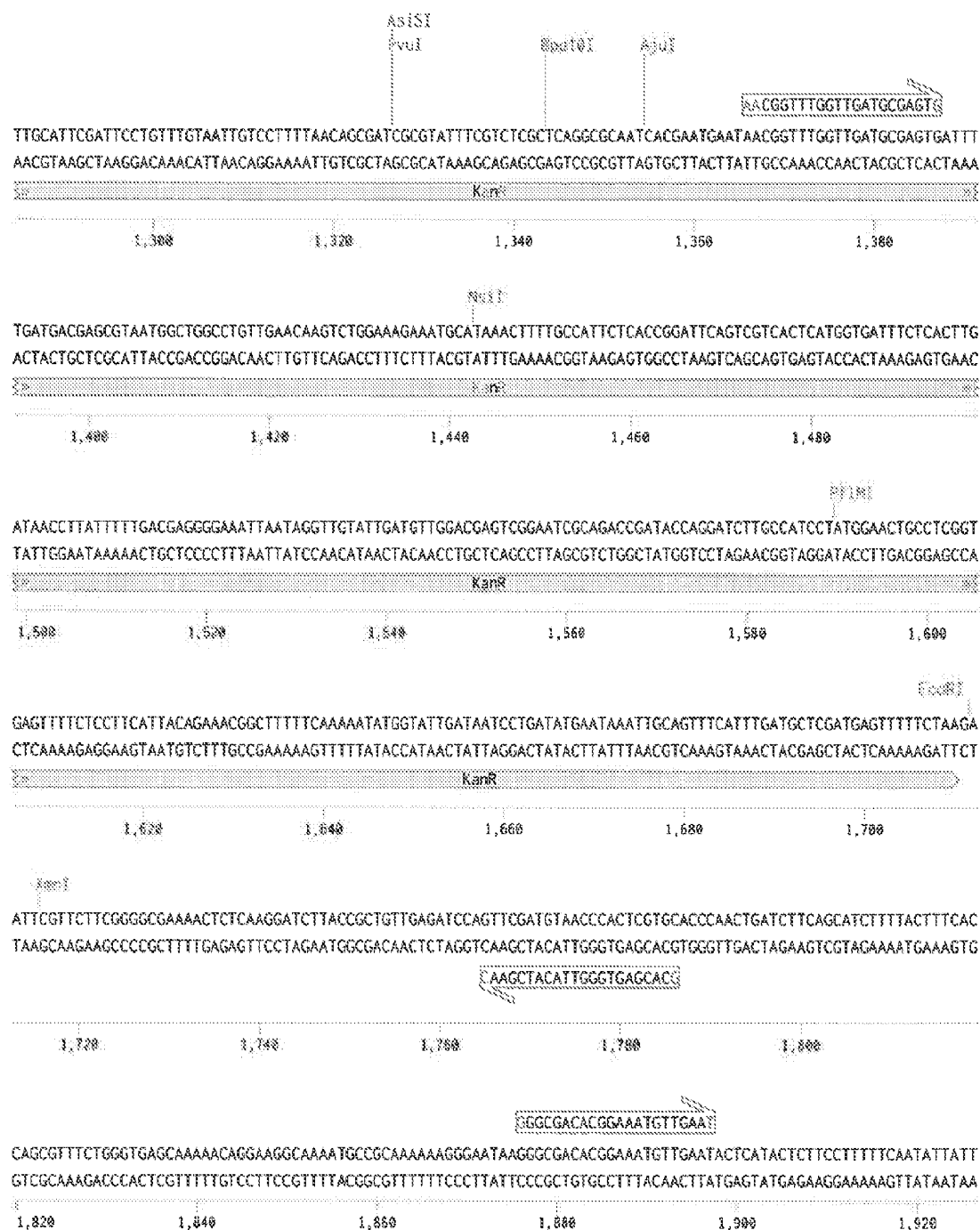


Figure 8D

NS pAAV.CMV.GNE.IRES.FST344 KanR (8484 bp) (from 1927-2782 bp)

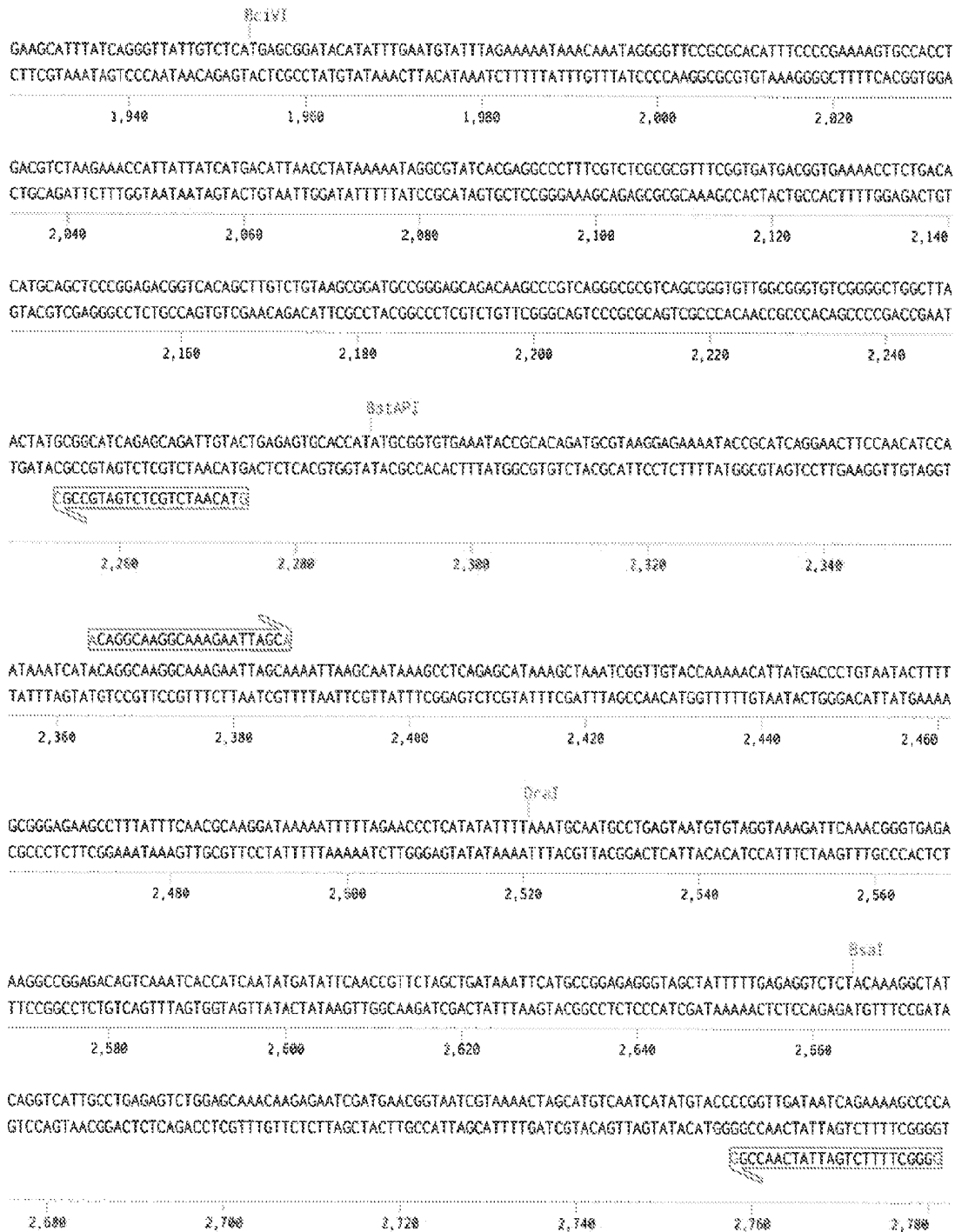


Figure 8E

NS pAAV.CMV.GNE.IRES.FST344 KanR (8484 bp) (from 2783-3638 bp)

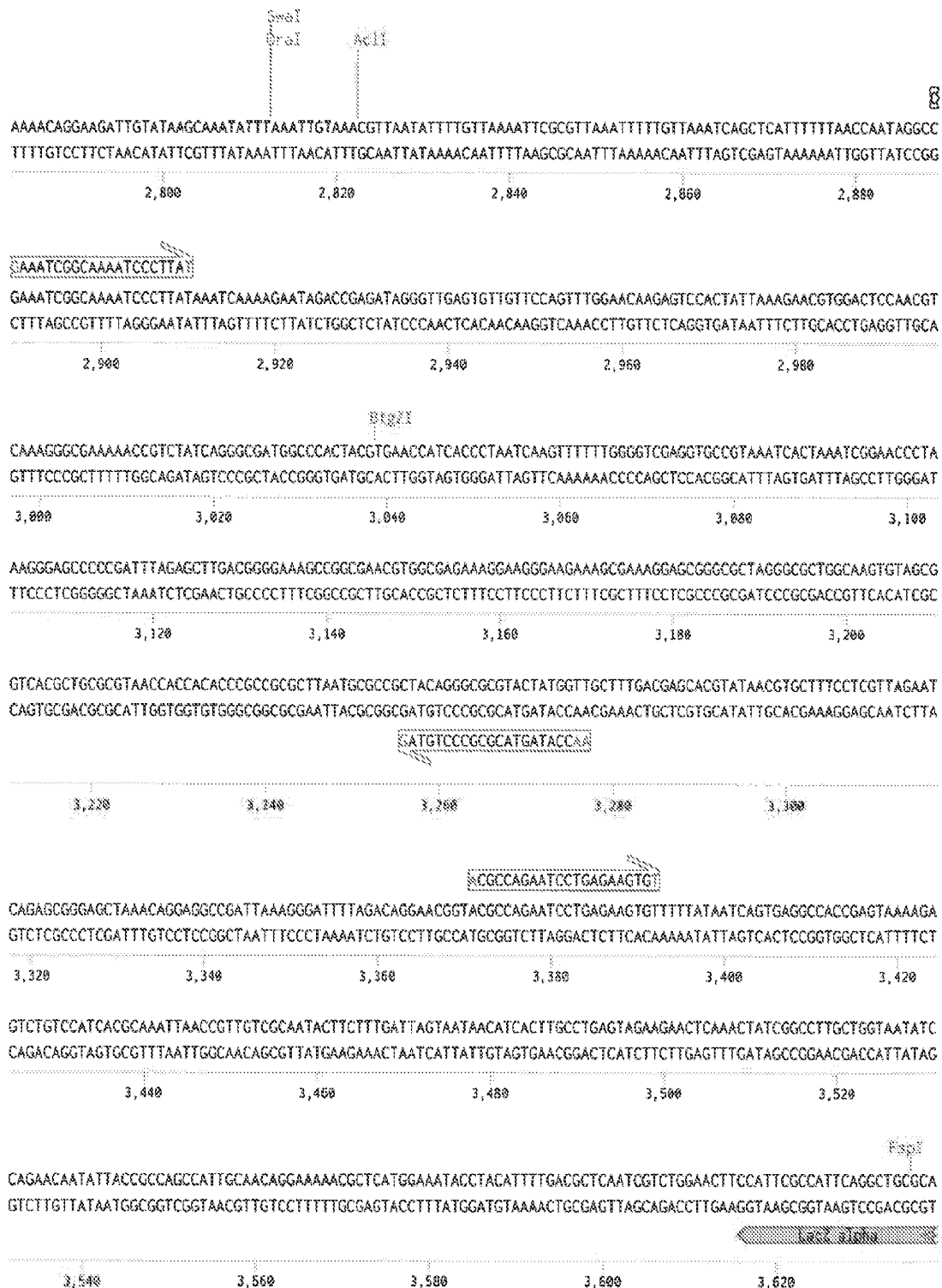


Figure 8F

NS pAAV.CMV.GNE.IRES.FST344 KanR (8484 bp) (from 3639-4280 bp)

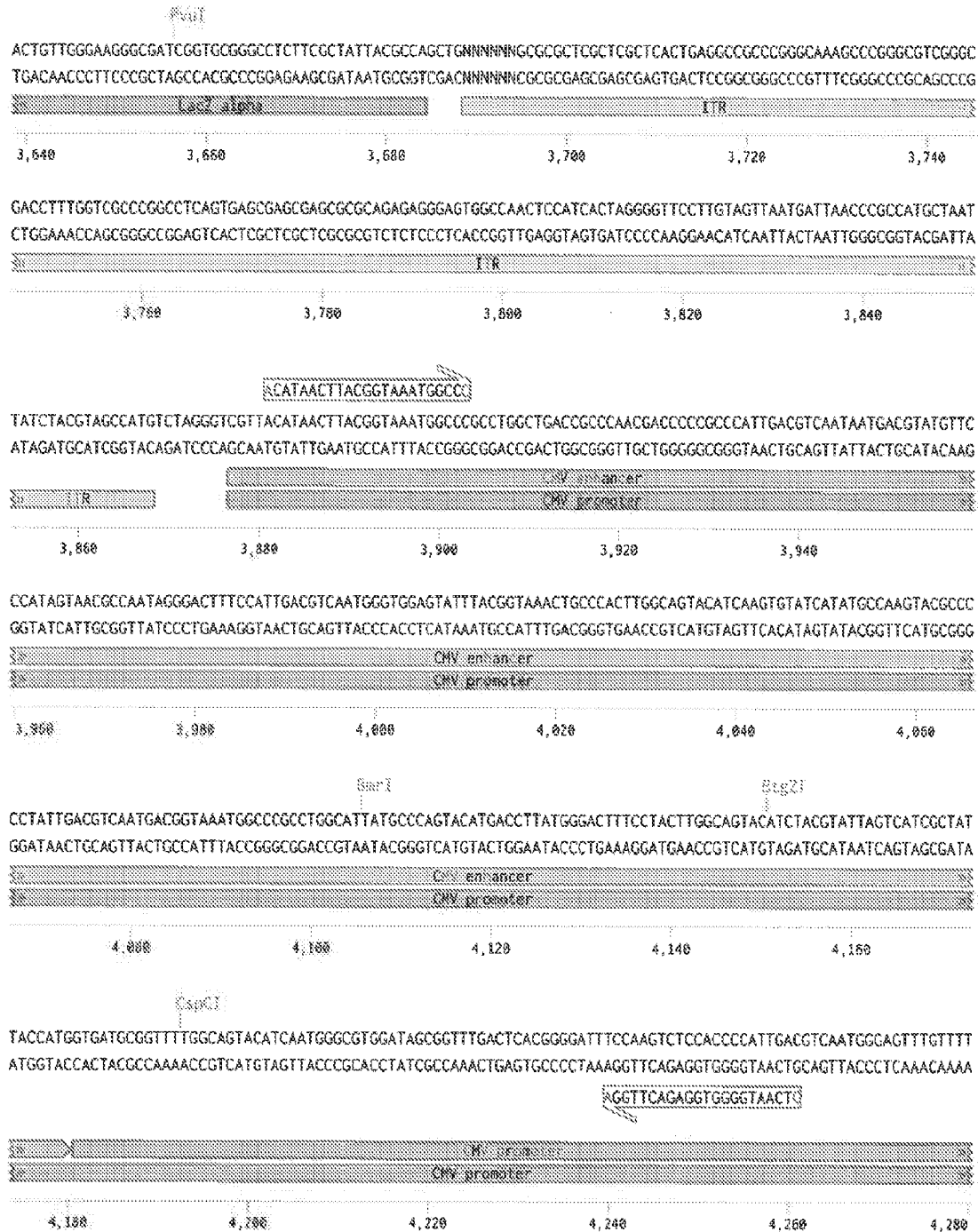


Figure 8G

NS pAAV.CMV.GNE.IRES.FST344 KanR (8484 bp) (from 4281-4815 bp)

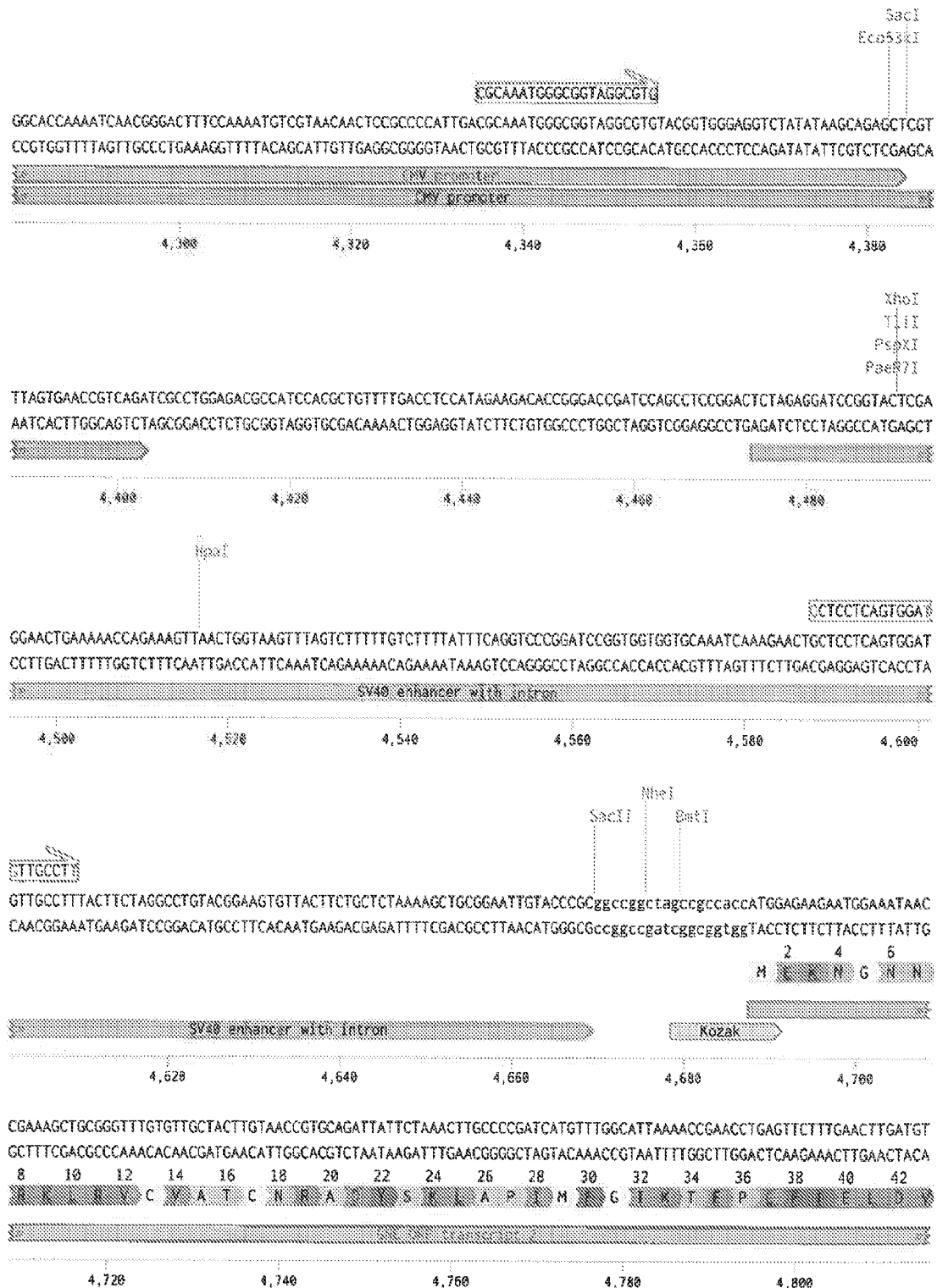


Figure 8H

NS pAAV.CMV.GNE.IRES.FST344 KanR (8484 bp) (from 4816-5350 bp)

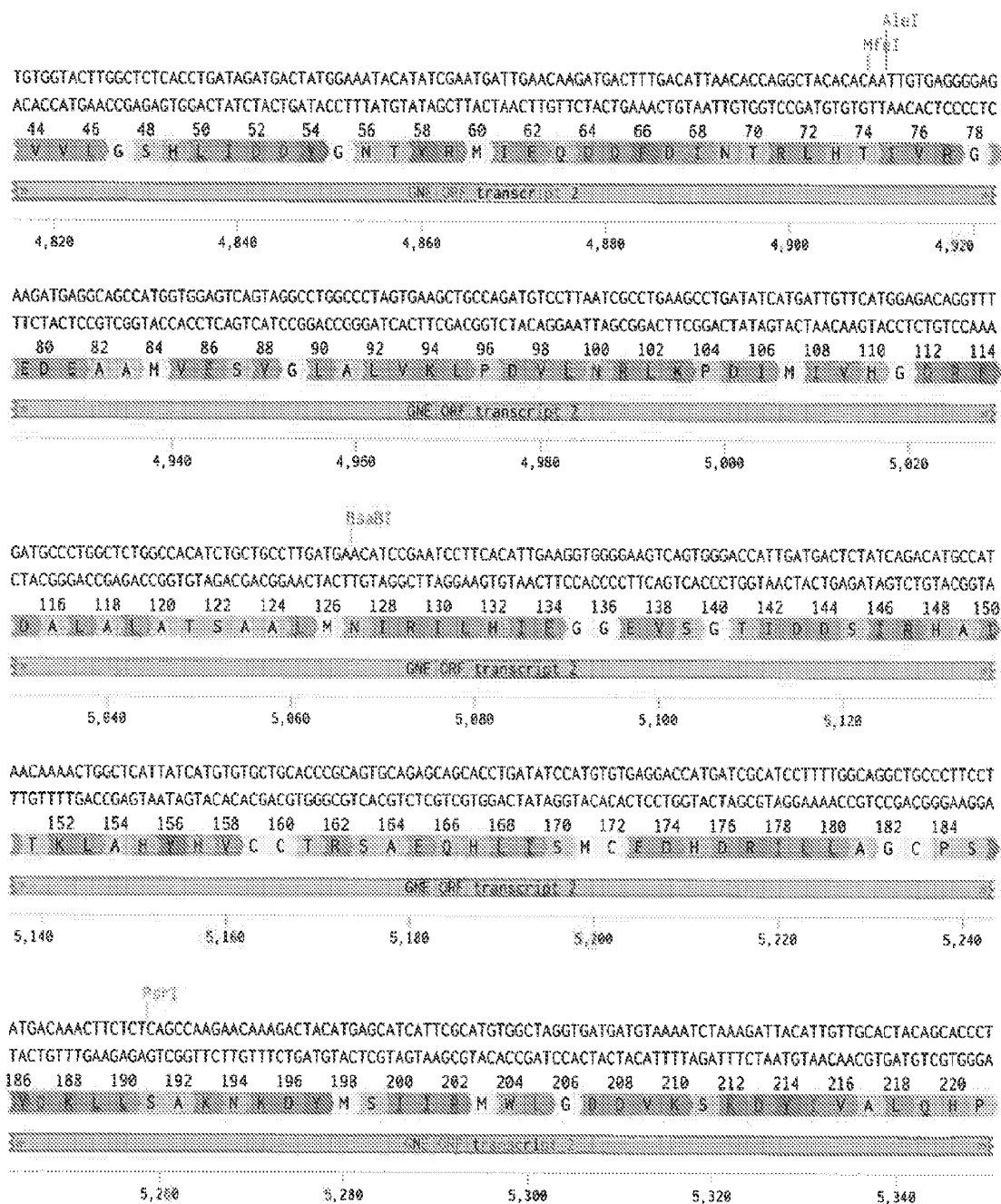


Figure 8I

NS pAAV.CMV.GNE.IRES.F5T344 KanR (8484 bp) (from 5351-5885 bp)

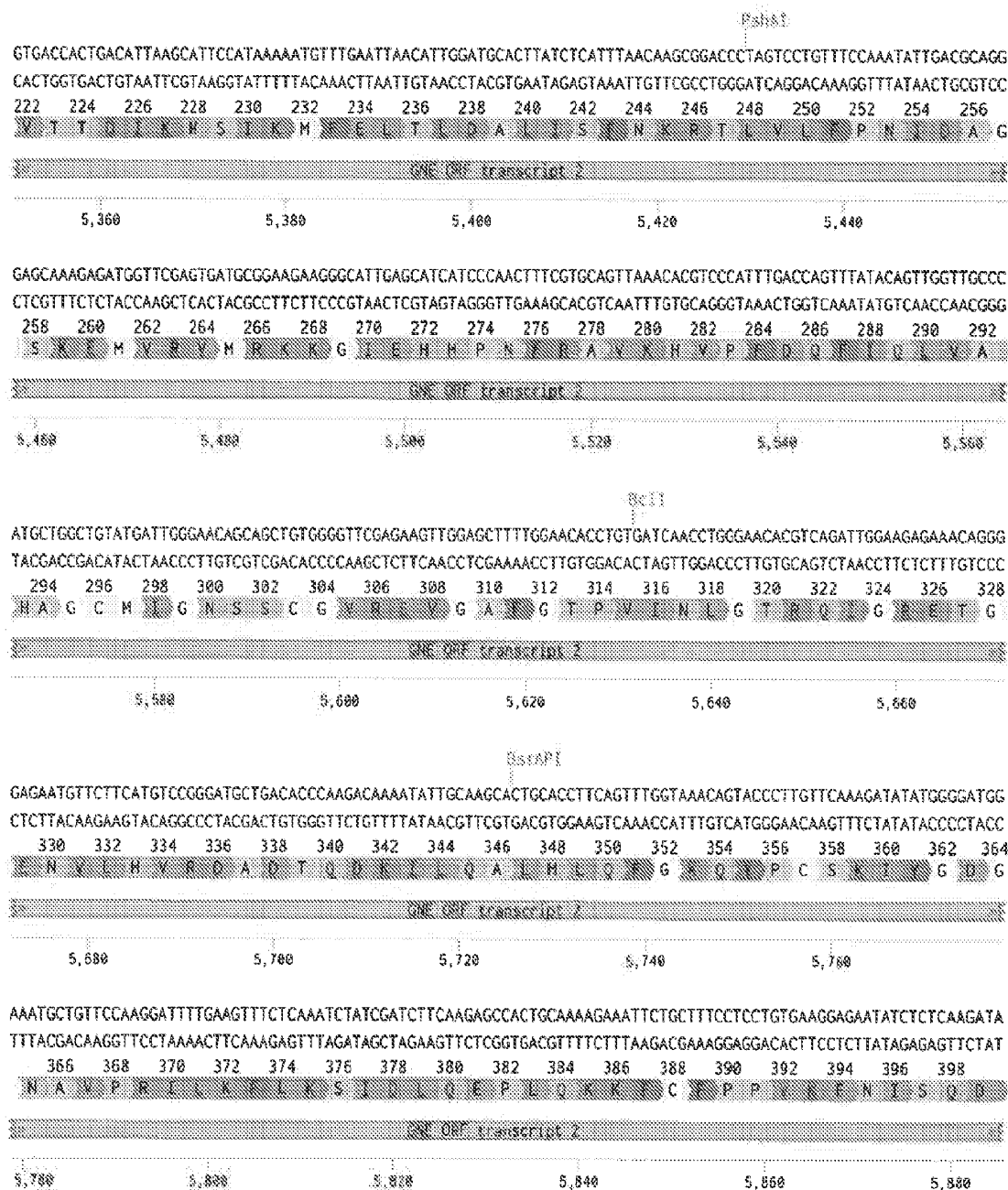


Figure 8J

NS pAAV.CMV.GNE.IRES.FST344 KanR (8484 bp) (from 5886-6420 bp)

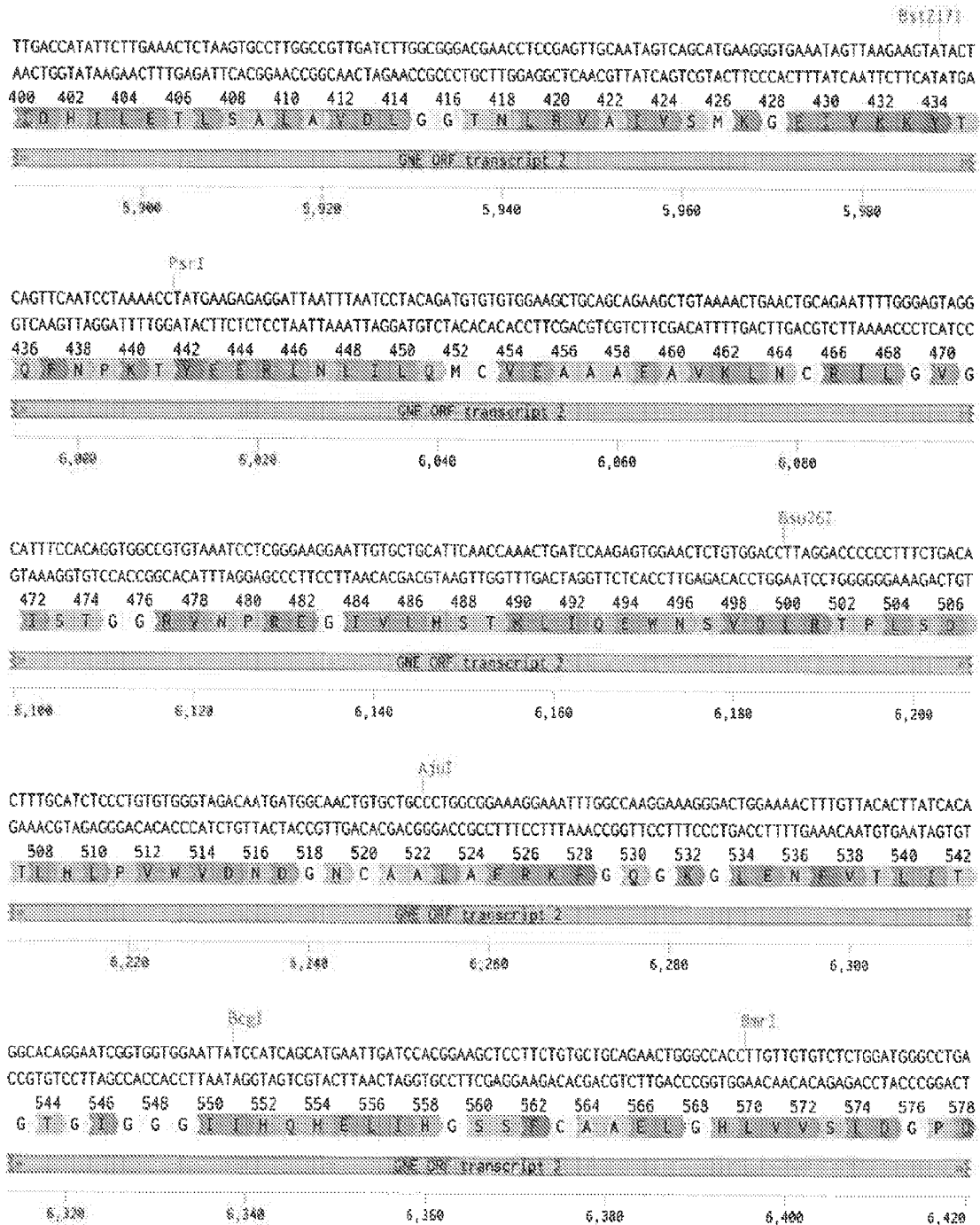


Figure 8K

NS pAAV.CMV.GNE.IRES.F5T344 KanR (8484 bp) (from 6421-6955 bp)

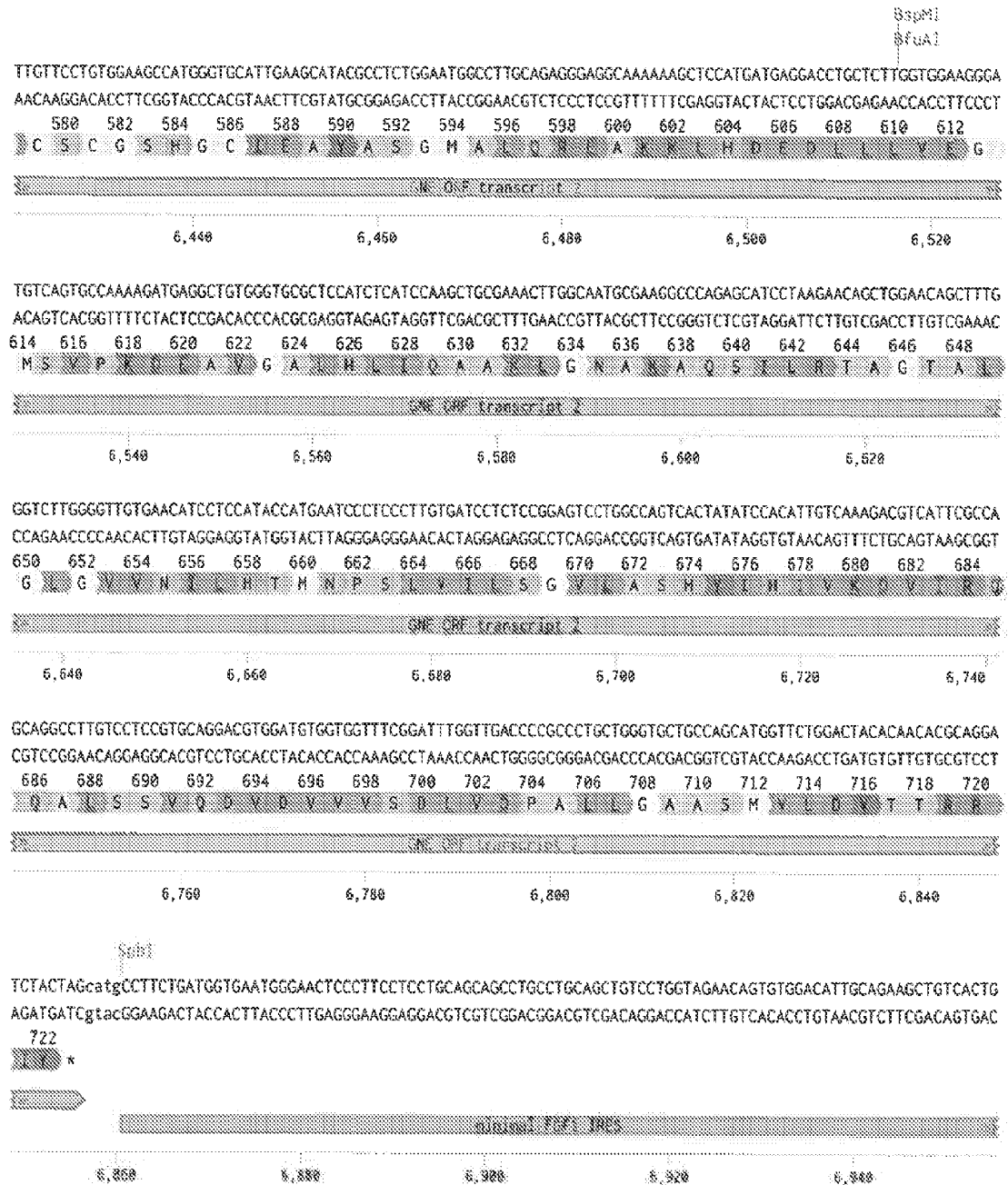


Figure 8L

NS pAAV.CMV.GNE.IRES.FST344 KanR (8484 bp) (from 6956-7490 bp)

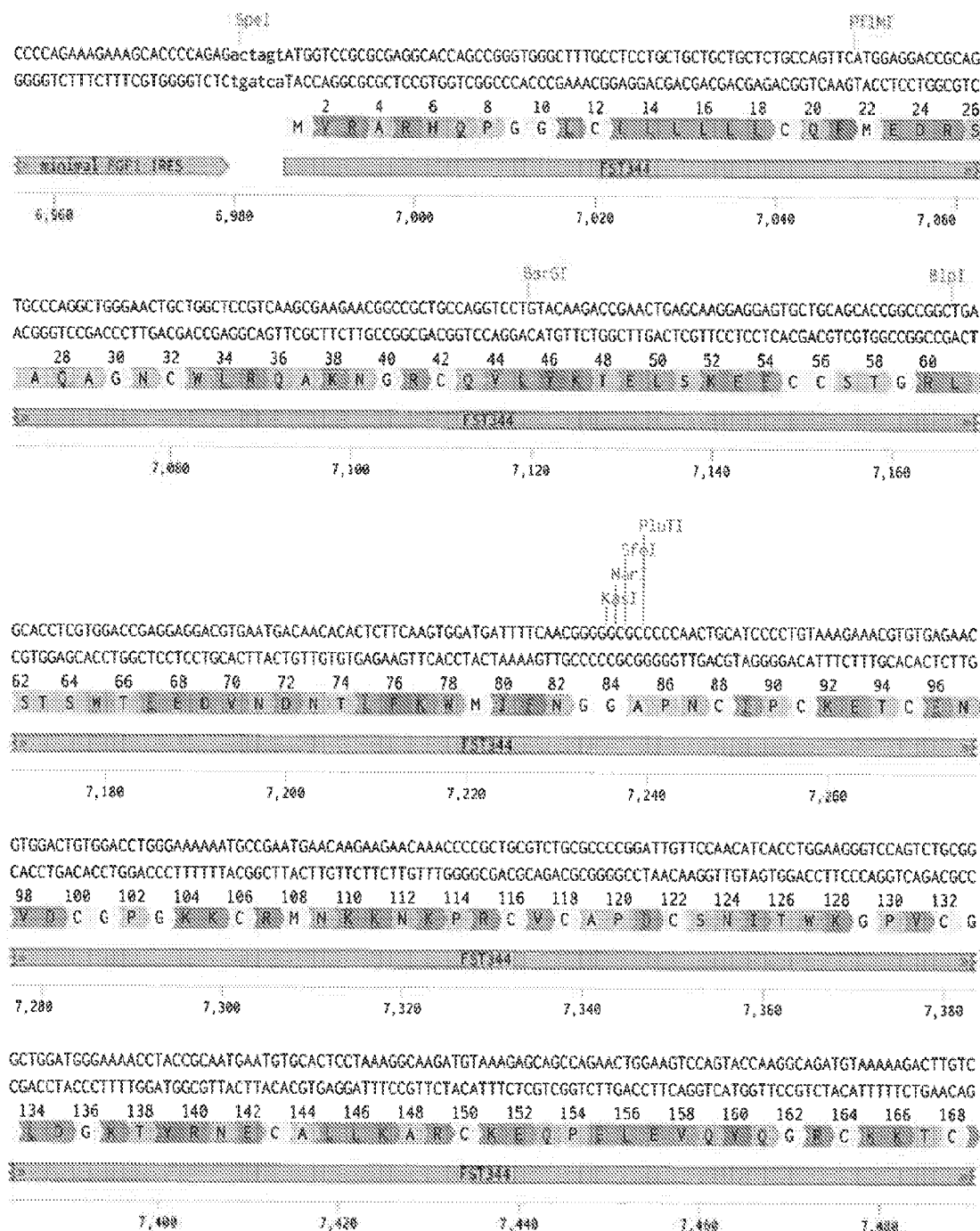


Figure 8M

N5 pAAV.CMV.GNE.IRES.FST344 KanR (8484 bp) (from 7491-8025 bp)

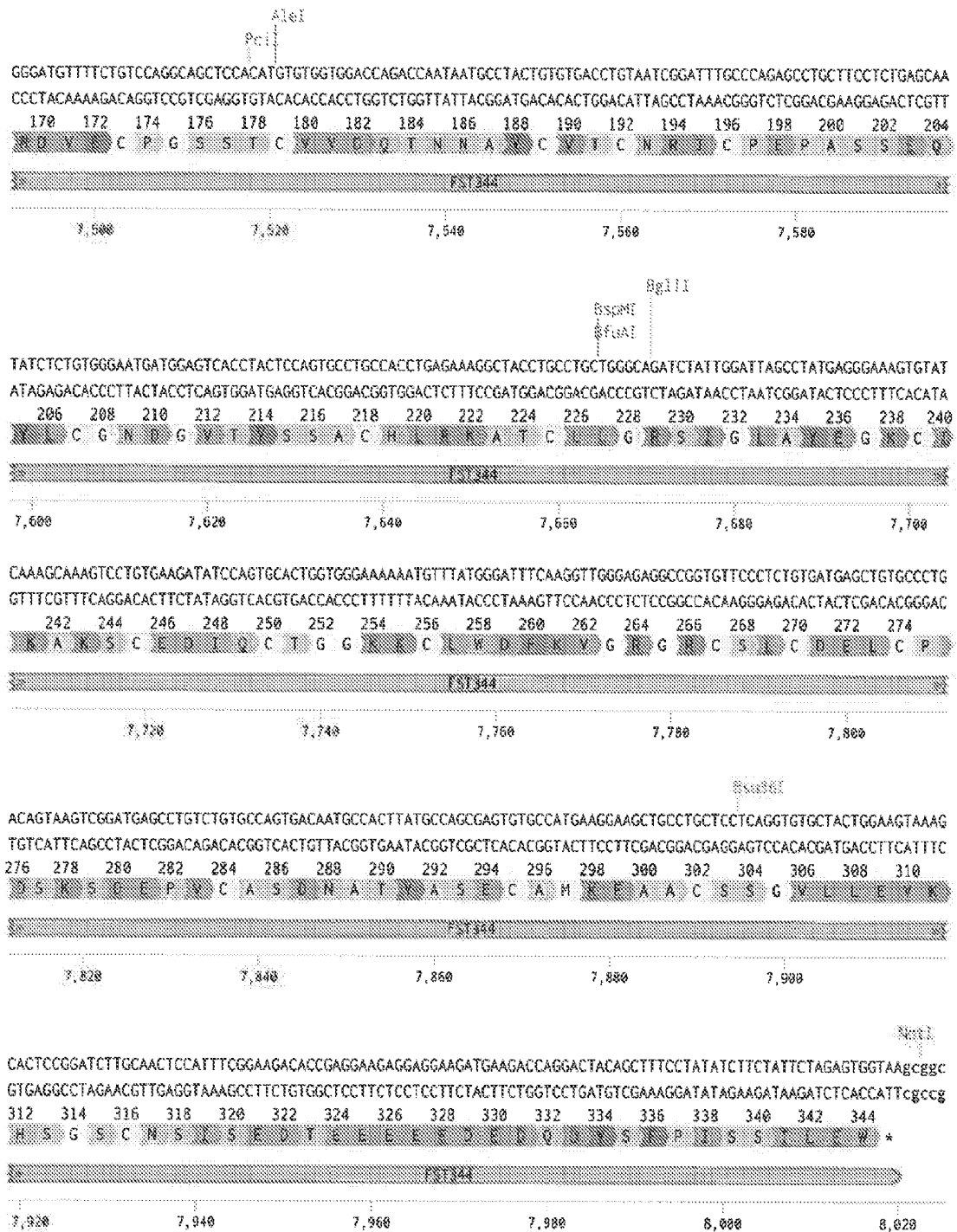
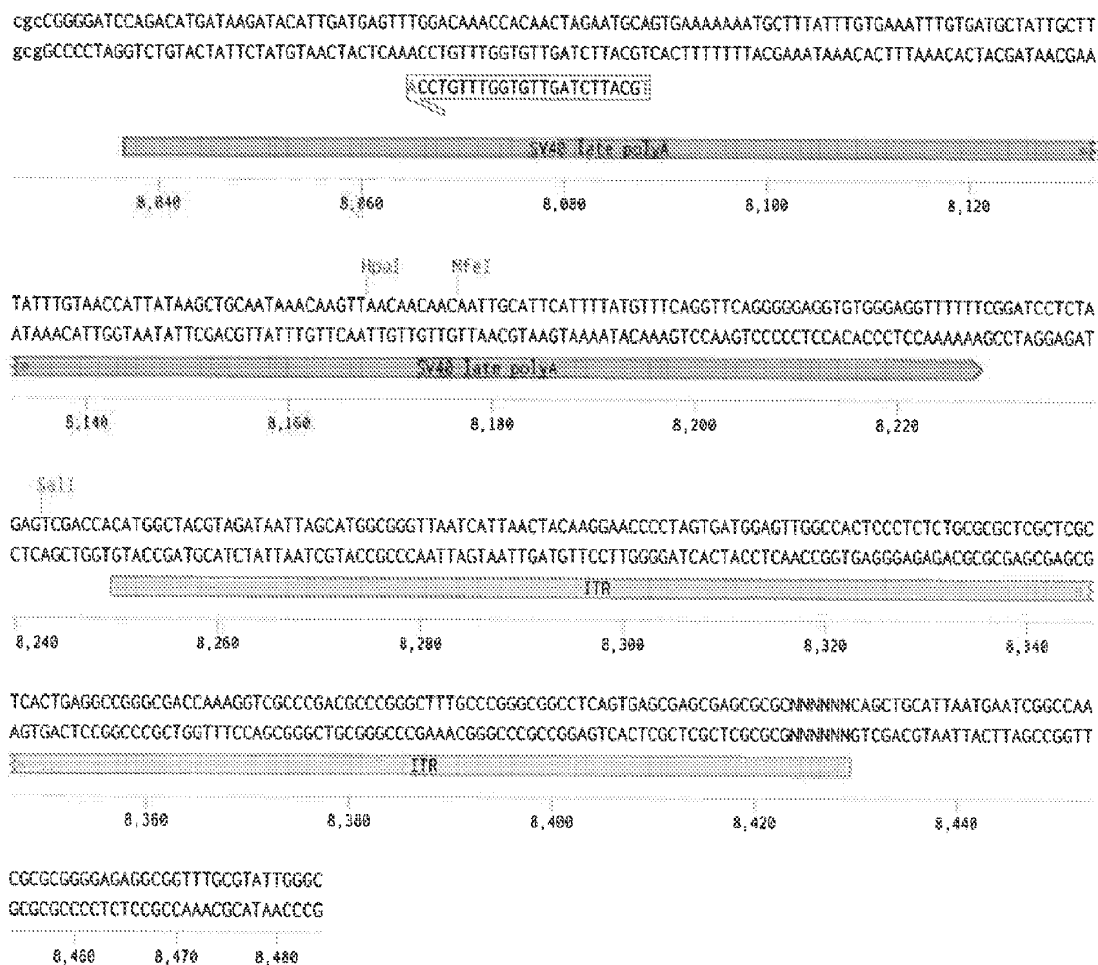


Figure 8N

NS pAAV.CMV.GNE.IRES.FST344 KanR (8484 bp) (from 8026-8484 bp)



(from 1-856 bp)

pAAV.CMV.GNE.miniIRES.sHB-IGF1 KanR (7933 bp)

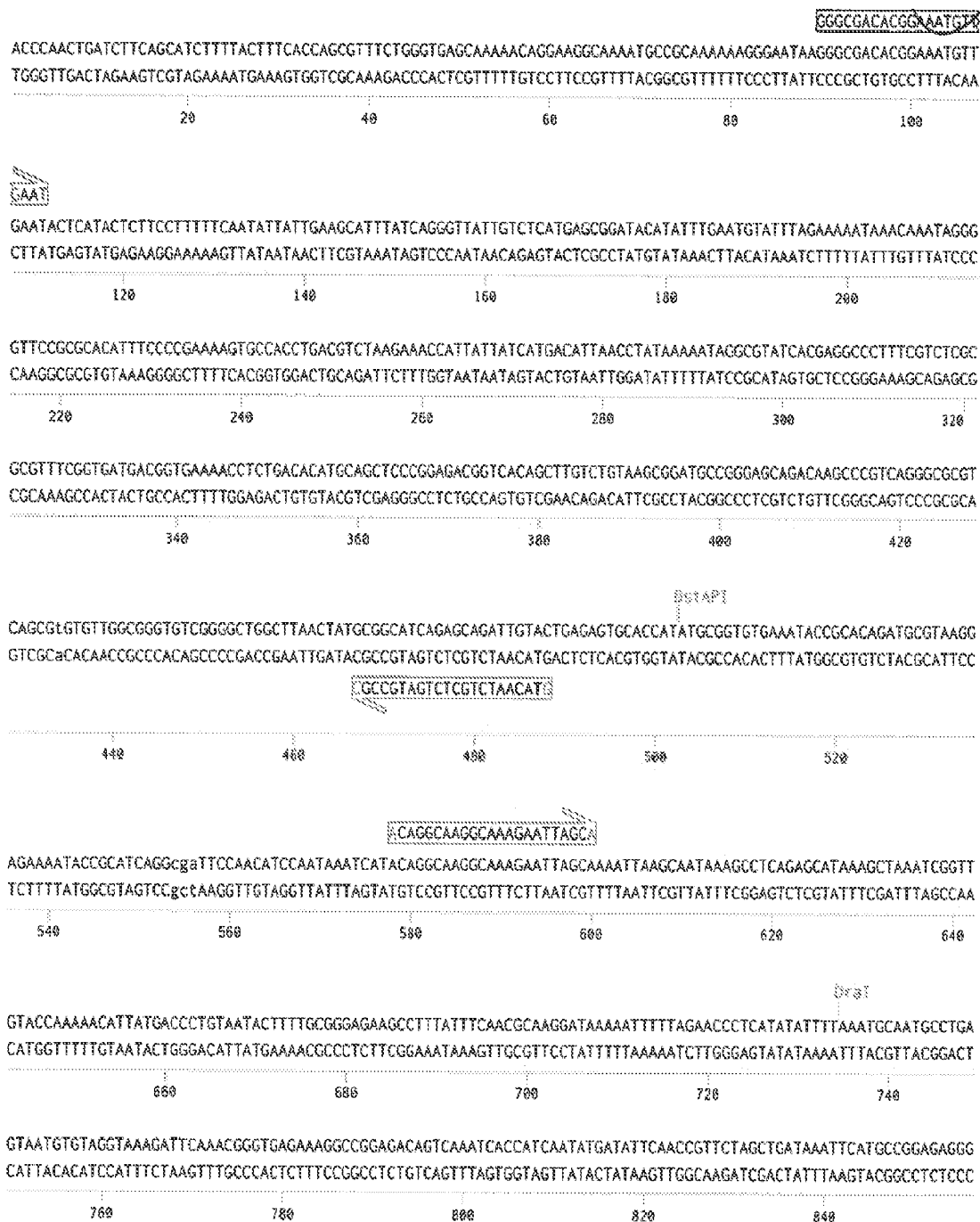


Figure 9B

pAAV.CMV.GNE.miniRES.sHB-IGF1 KanR (7933 bp) (from 857-1605 bp)

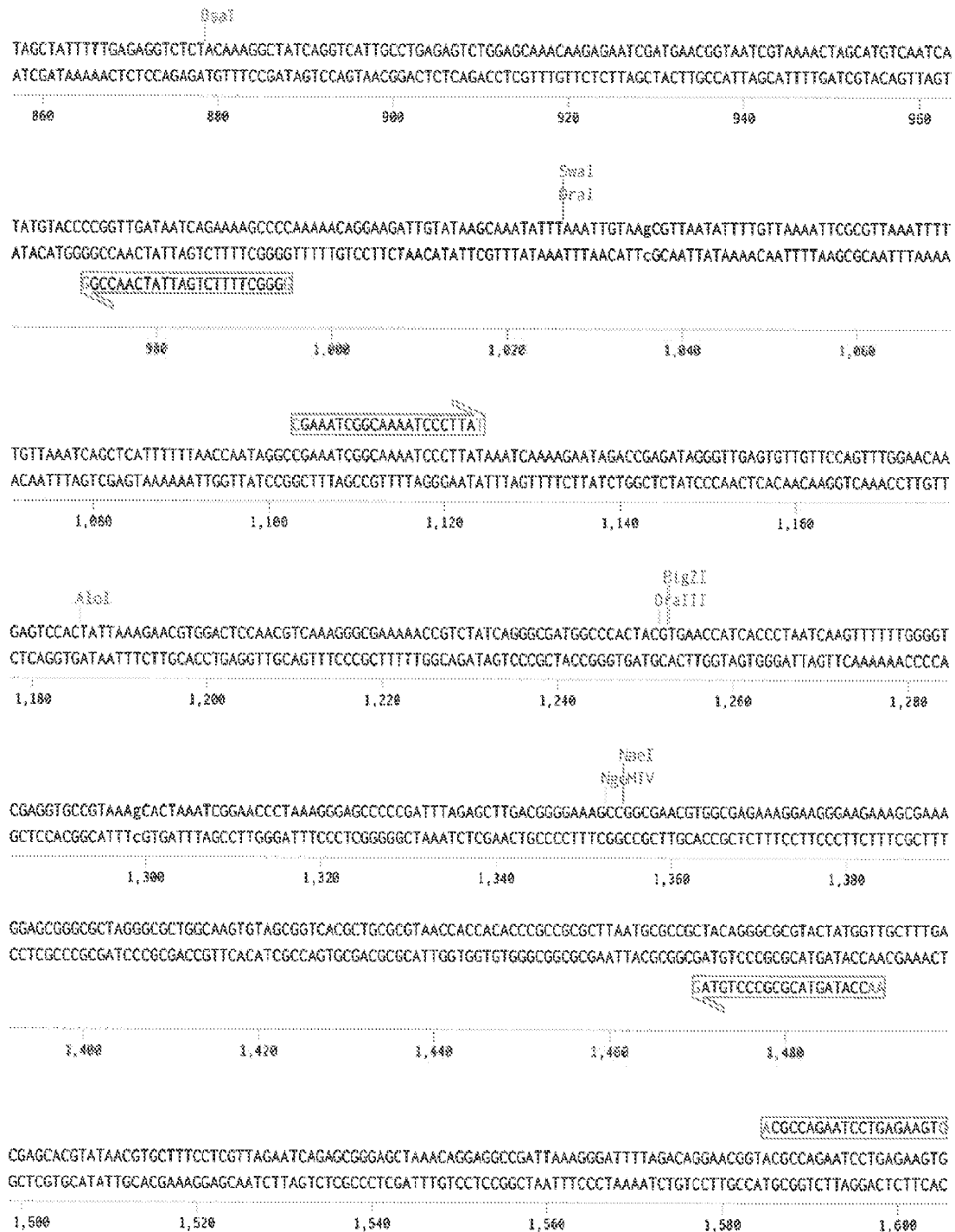


Figure 9C

pAAV.CMV.GNE.miniIRES.sHB-IGF1 KanR (7933 bp) (from 1606-2354 bp)

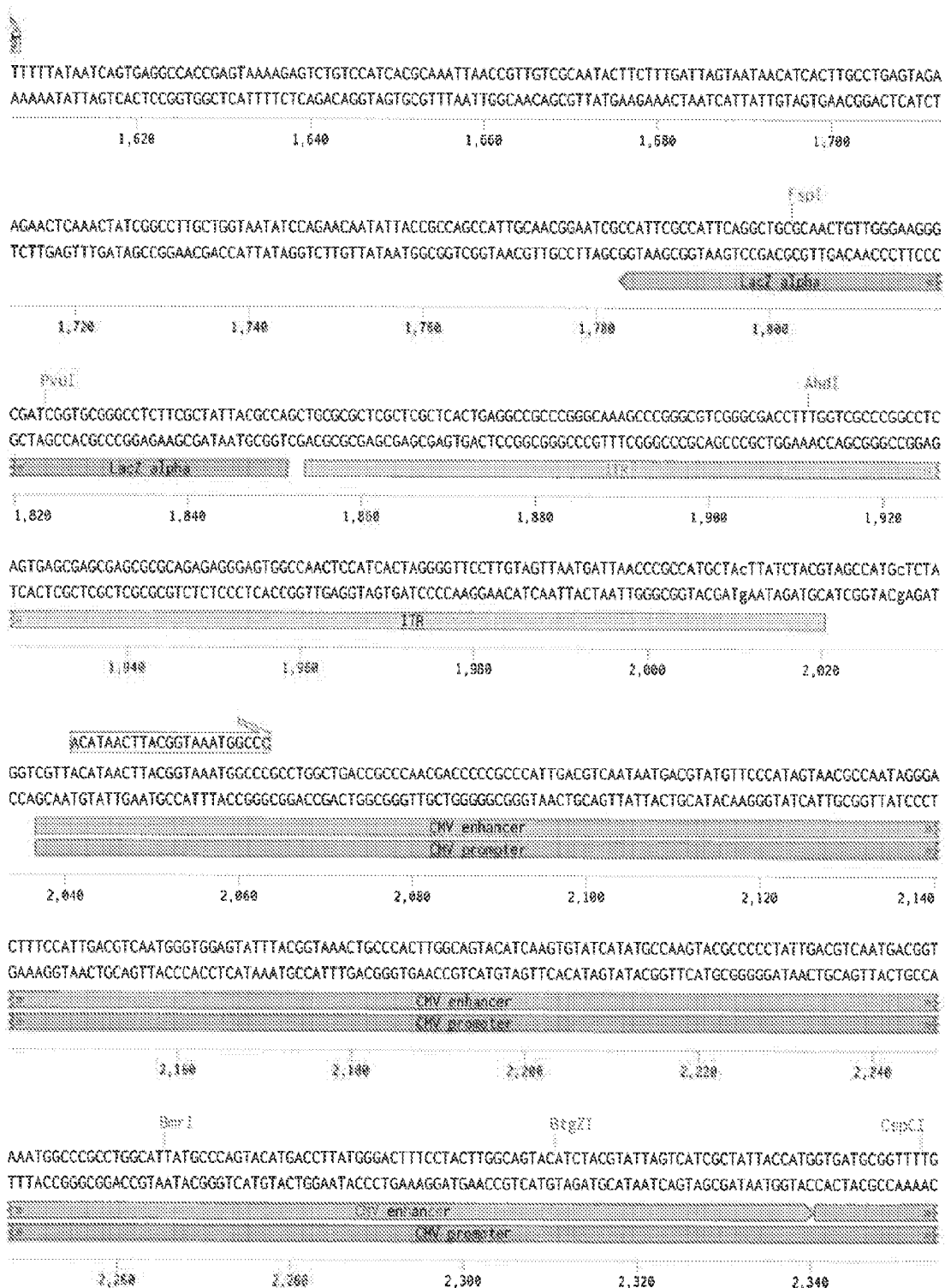


Figure 9D

pAAV.CMV.GNE.miniIRES.sHB-IGF1 KanR (7933 bp) (from 2355-2782 bp)

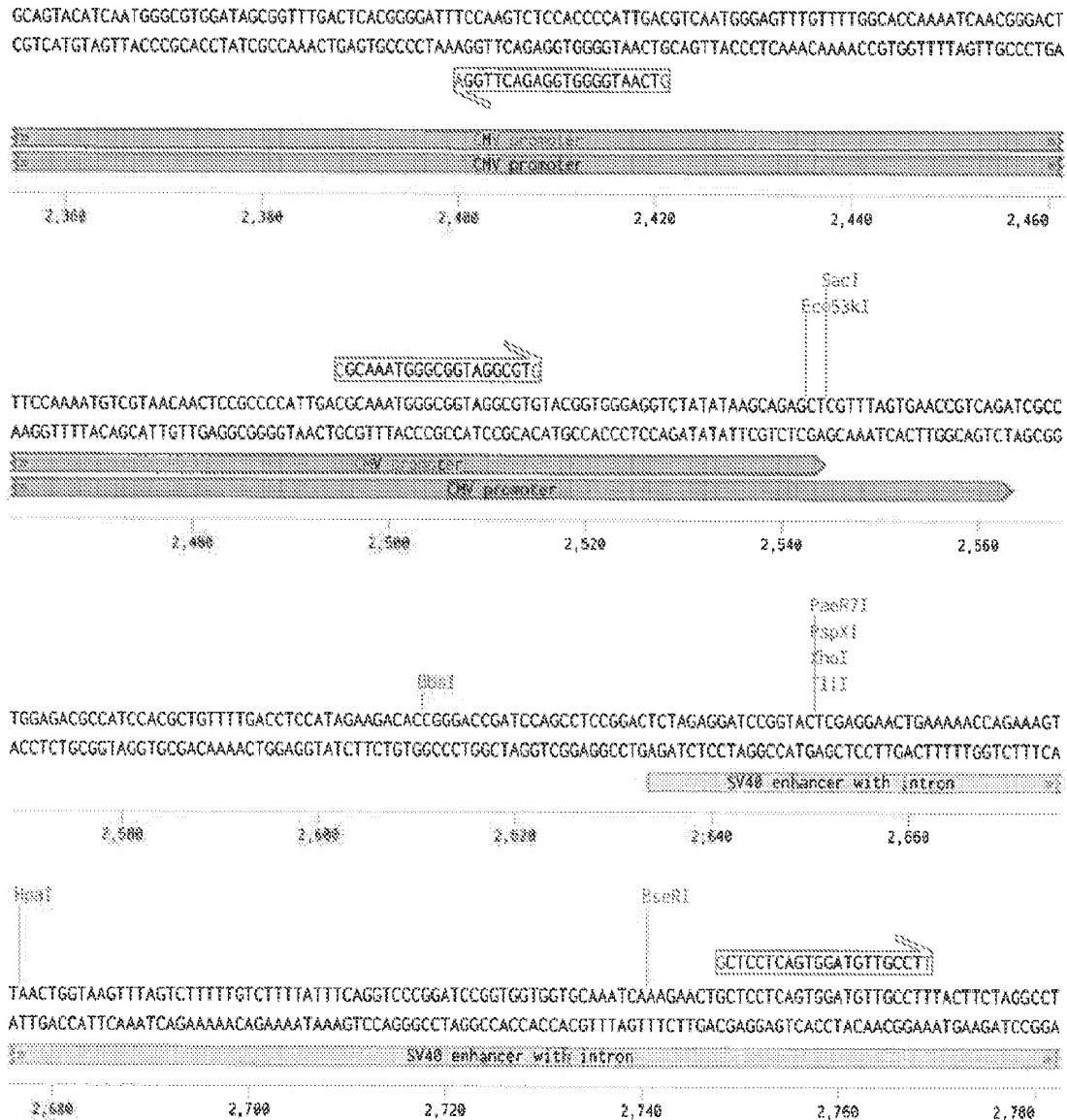


Figure 9E

pAAV.CMV.GNE.miniIRES.SHB-IGF1 KanR (7933 bp) (from 2783-3210 bp)

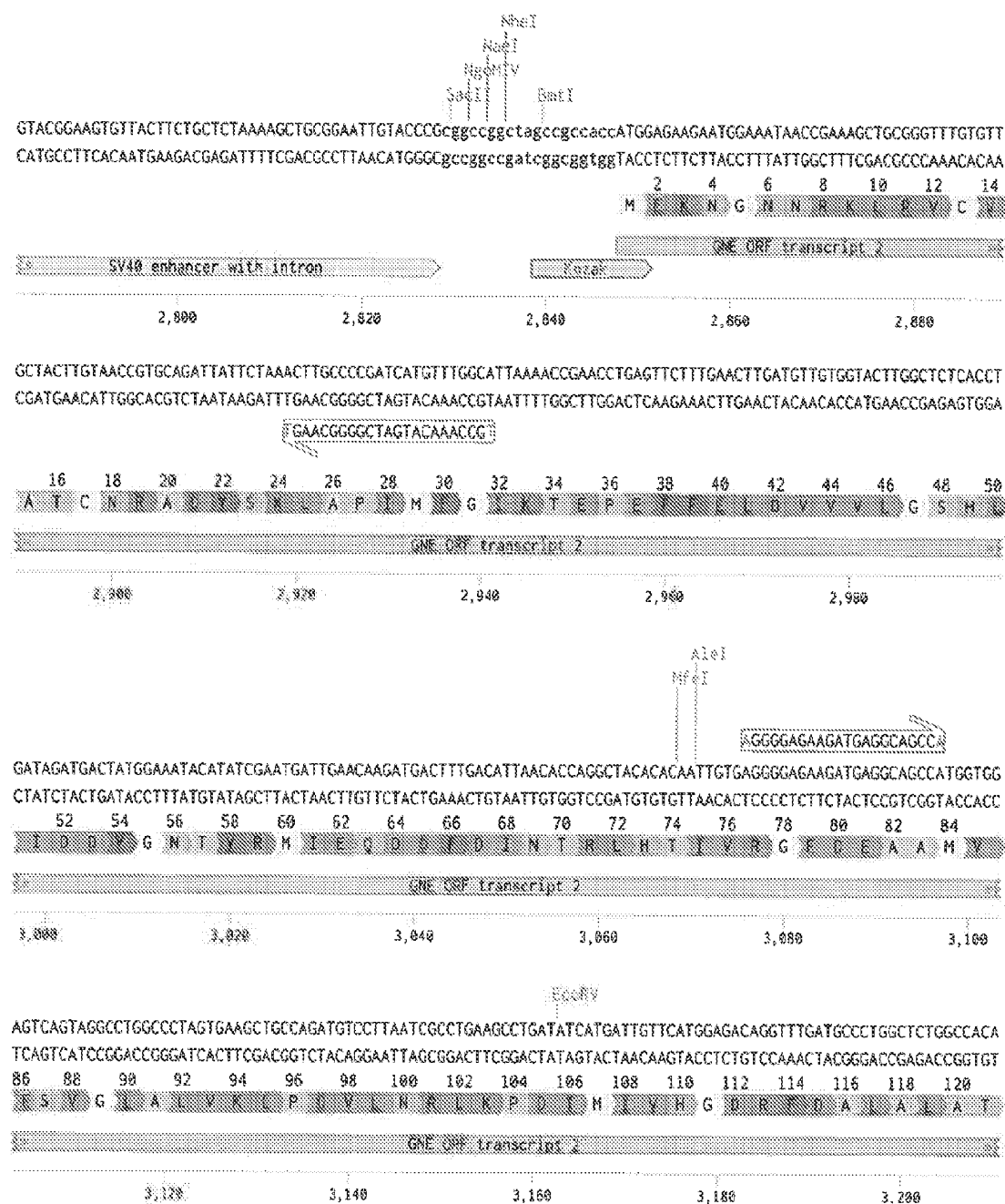


Figure 9F

pAAV.CMV.GNE.miniIRES.sHB-IGF1 KanR (7933 bp) (from 3211-3745 bp)

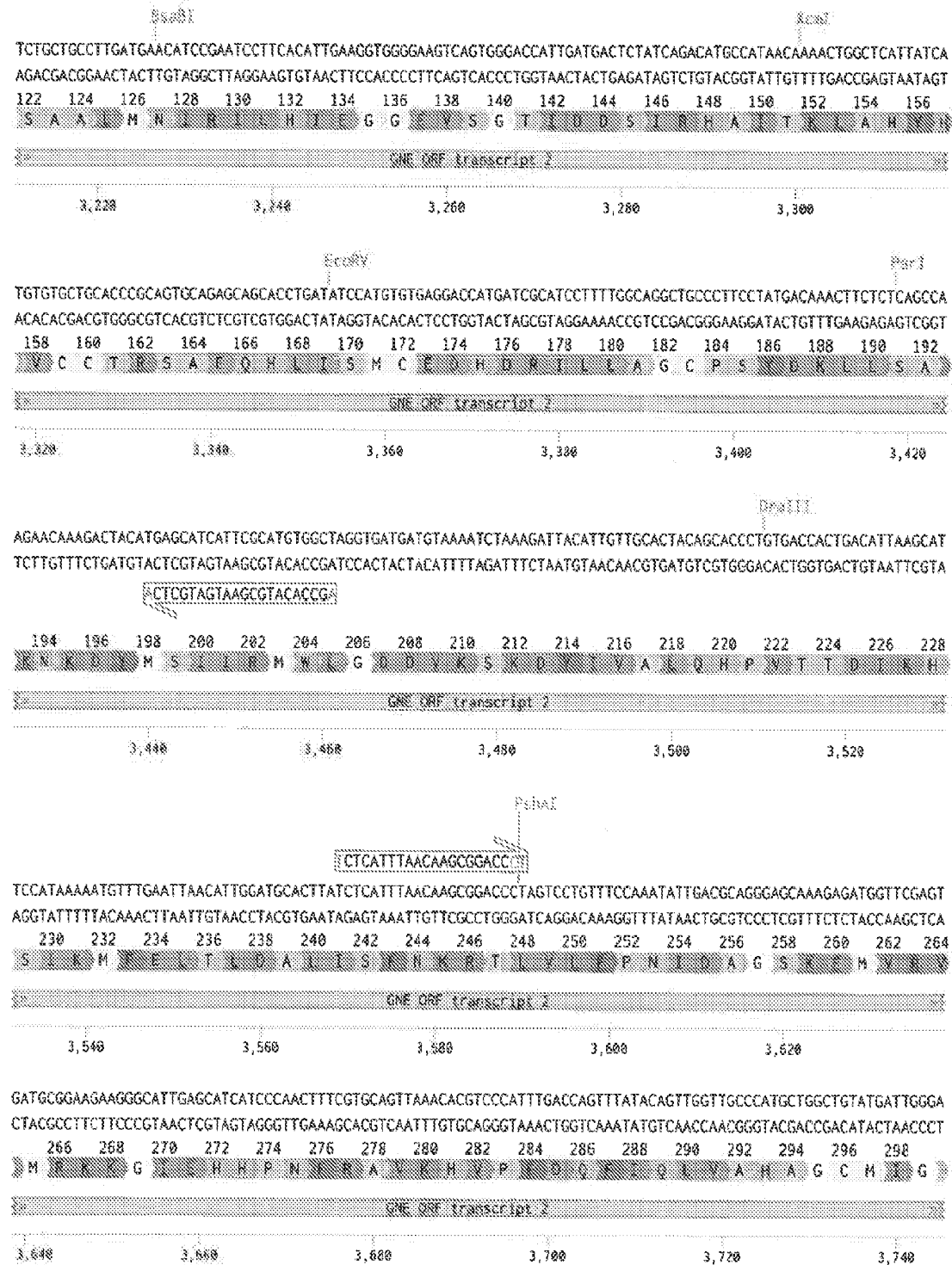


Figure 9G

pAAV.CMV.GNE.miniIRE5.SHB-IGF1 KanR (7933 bp) (from 3746-4280 bp)

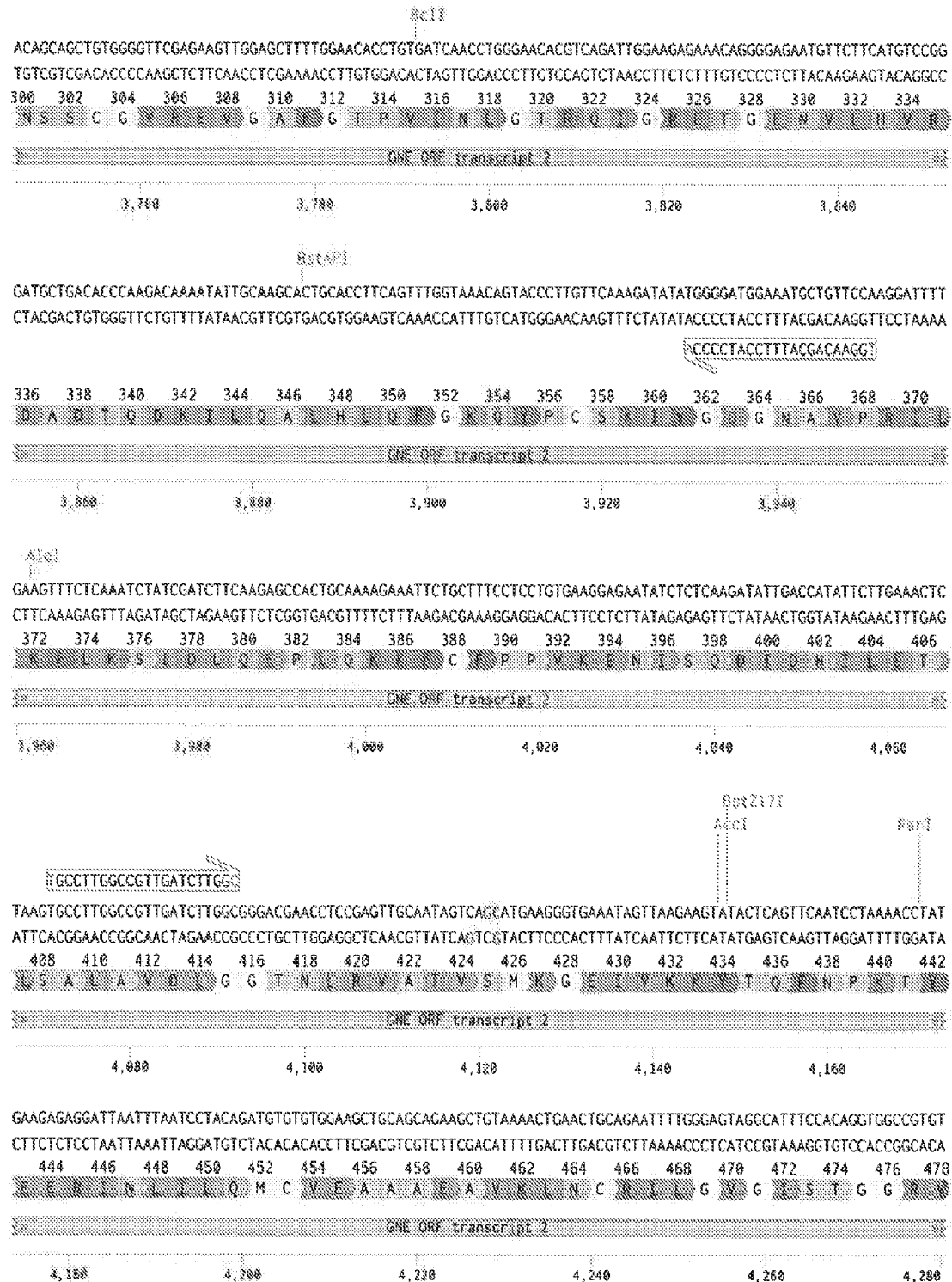


Figure 9H

pAAV.CMV.GNE.miniRES.sHB-IGF1 KanR (7933 bp) (from 4281-4815 bp)

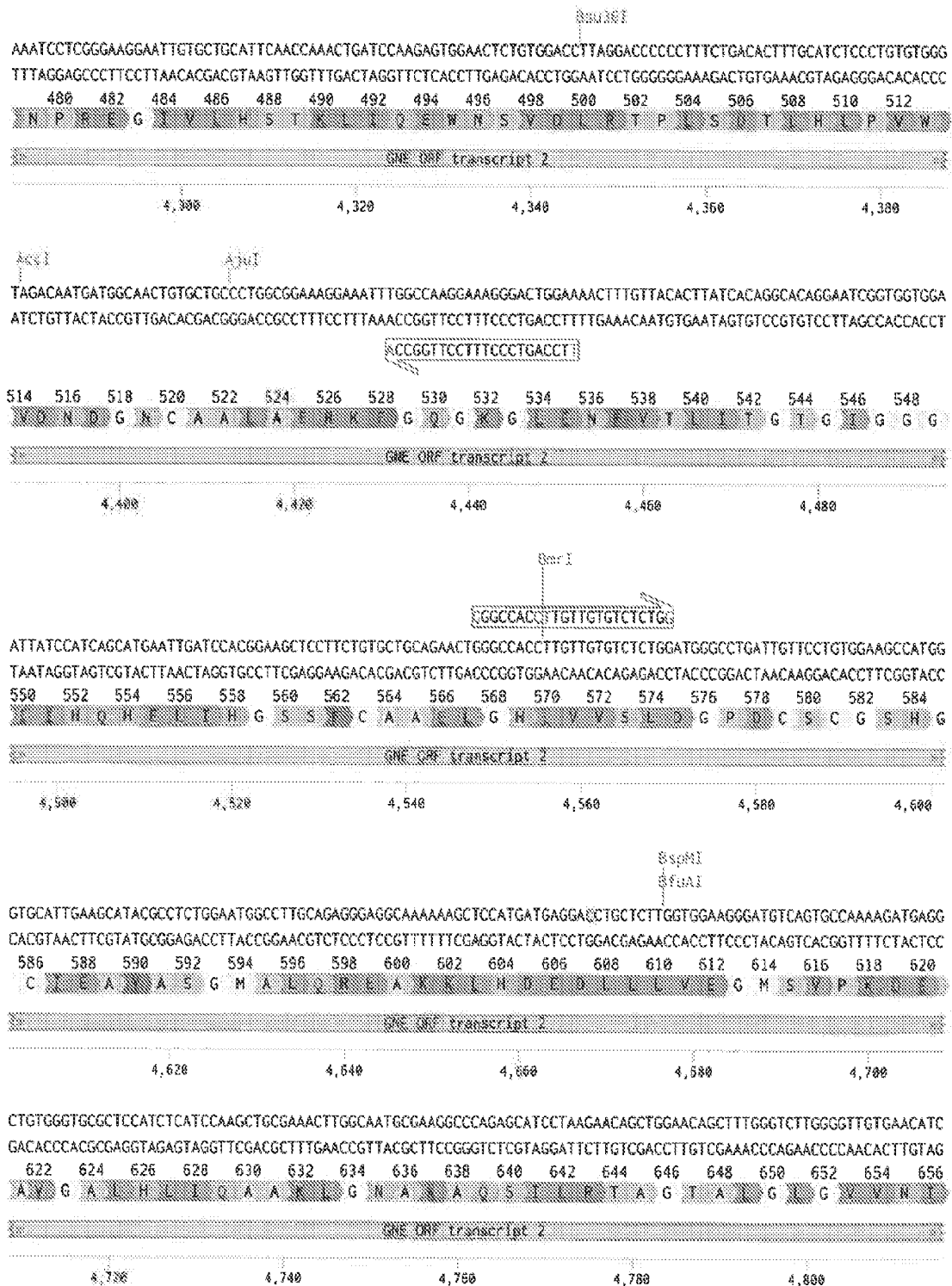


Figure 9I

pAAV.CMV.GNE.miniIRES.sHB-IGF1 KanR (7933 bp) (from 4816-5350 bp)

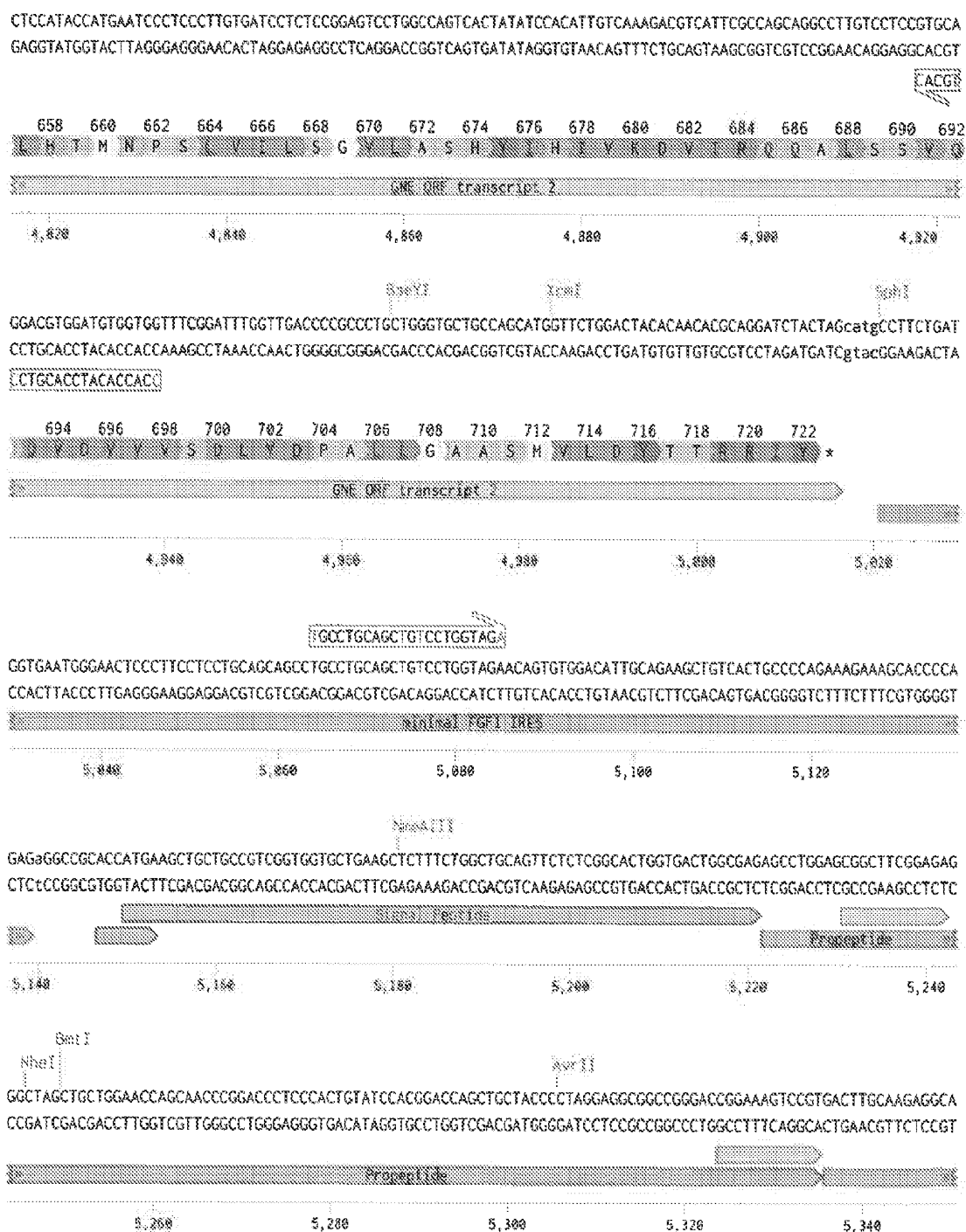


Figure 9J

pAAV.CMV.GNE.miniRES.shB-IGF1 KanR (7933 bp) (from 5351-5778 bp)

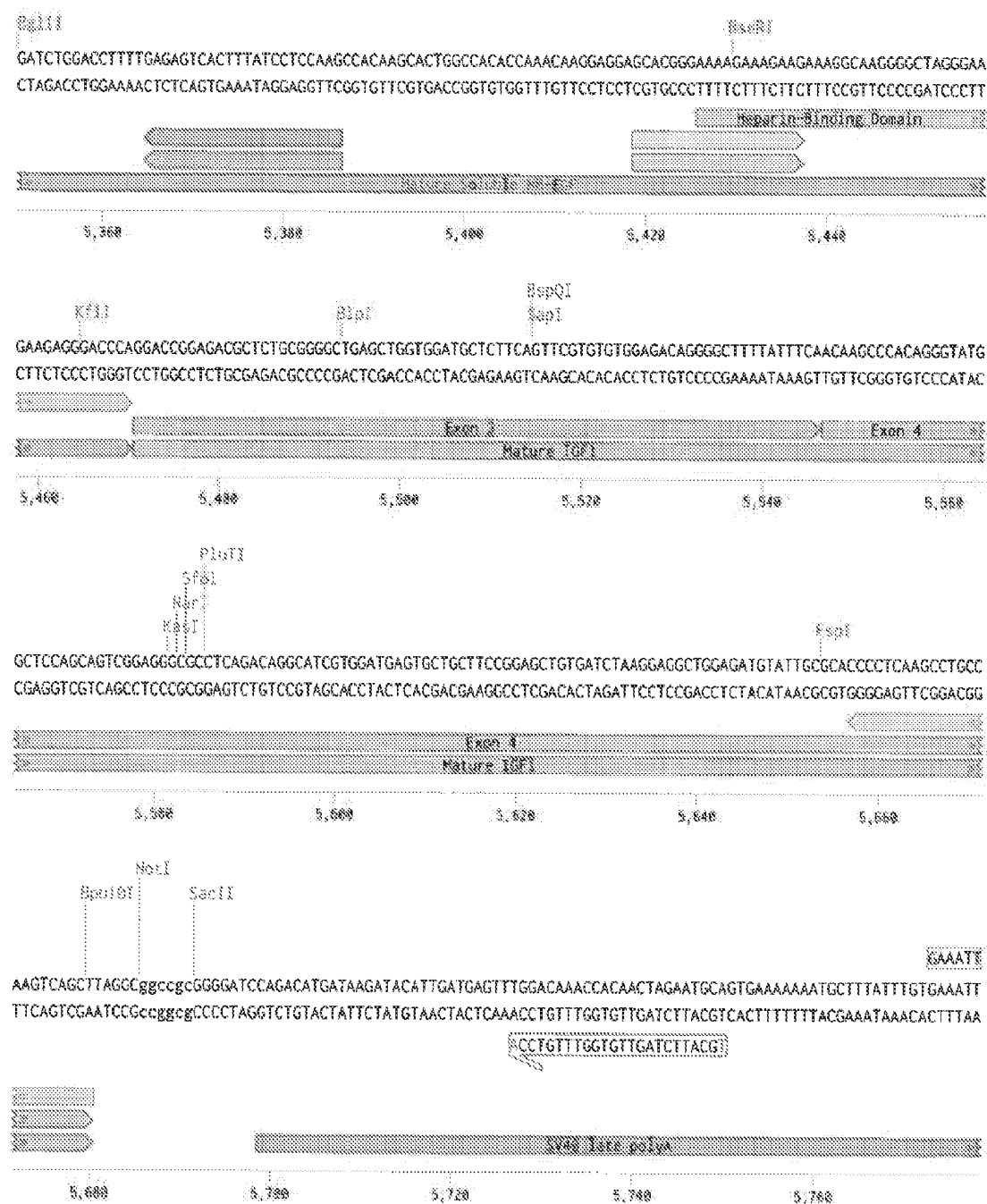


Figure 9K

pAAV.CMV.GNE.miniRES.sHB-IGF1 KanR (7933 bp) (from 5779-6420 bp)

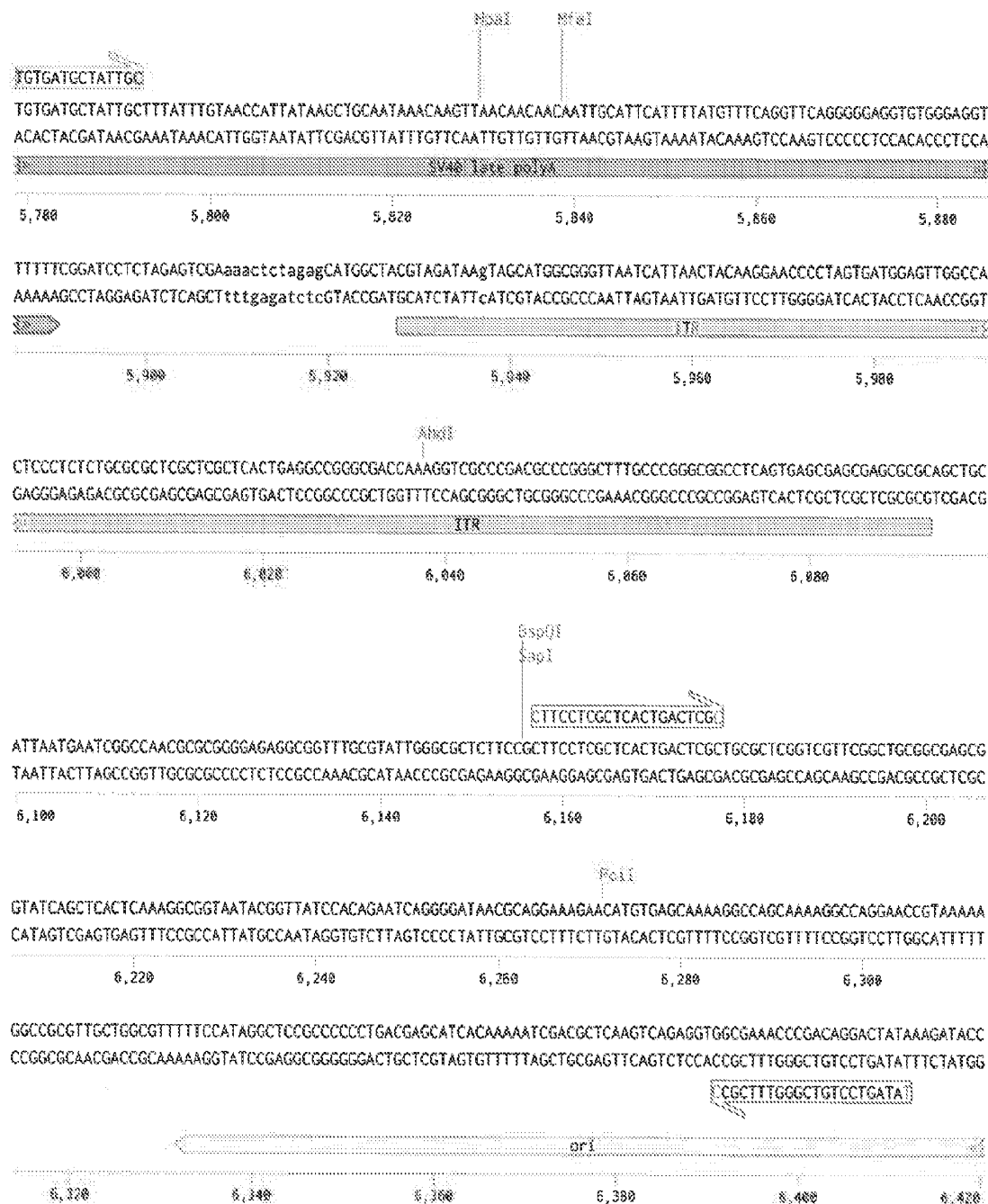


Figure 9L

pAAV.CMV.GNE.miniRES.sHB-IGF1 KanR (7933 bp) (from 6421-7062 bp)

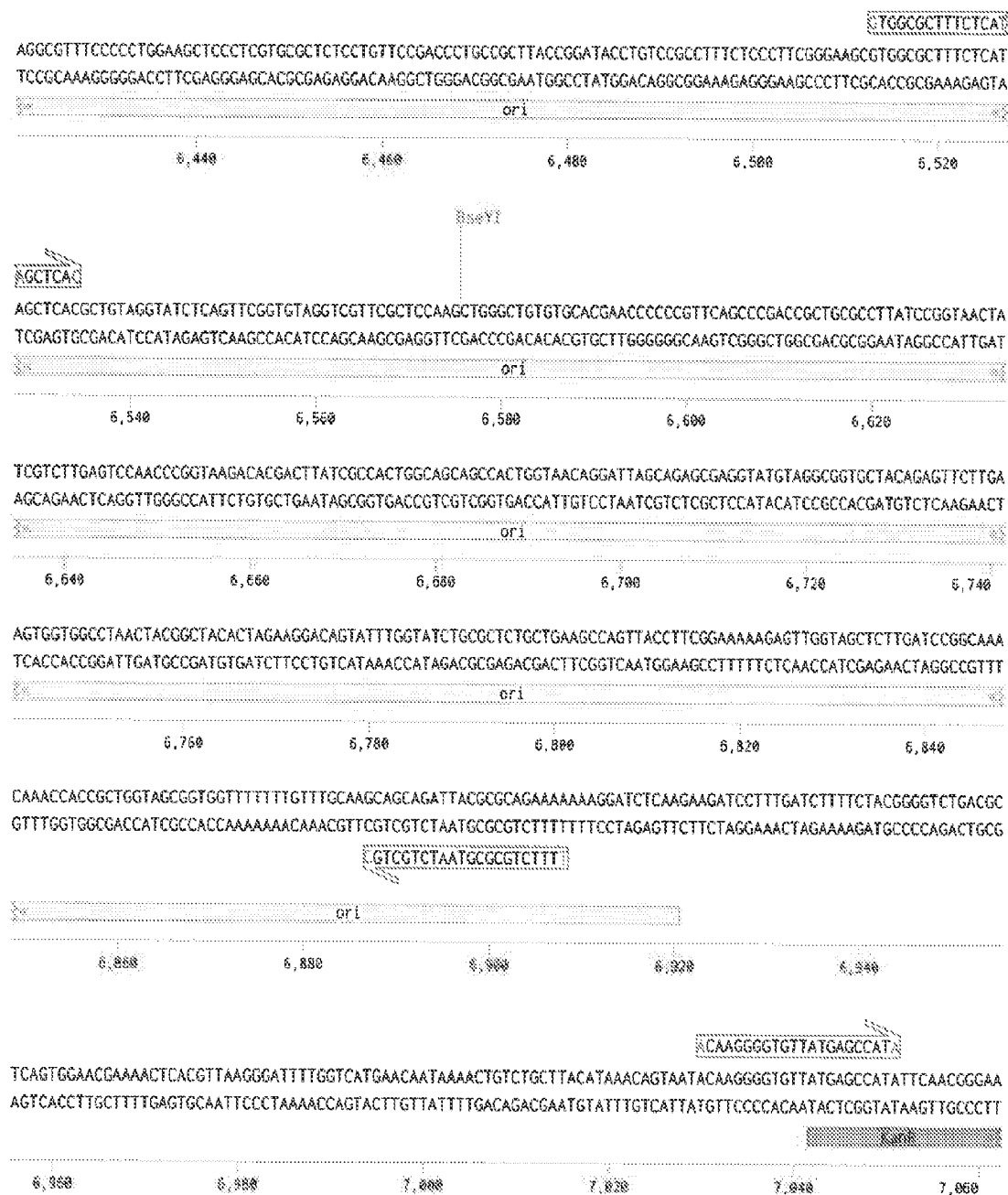
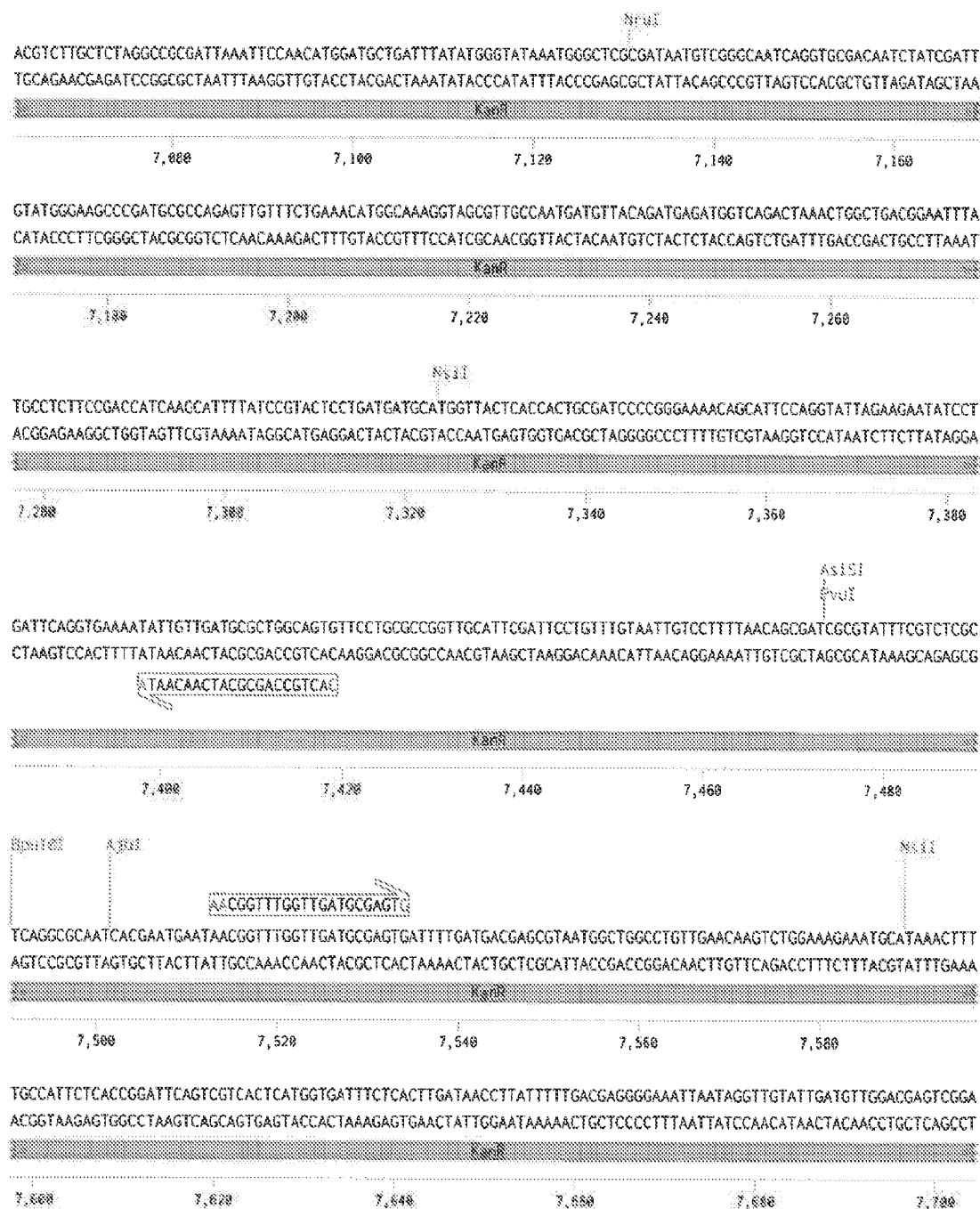
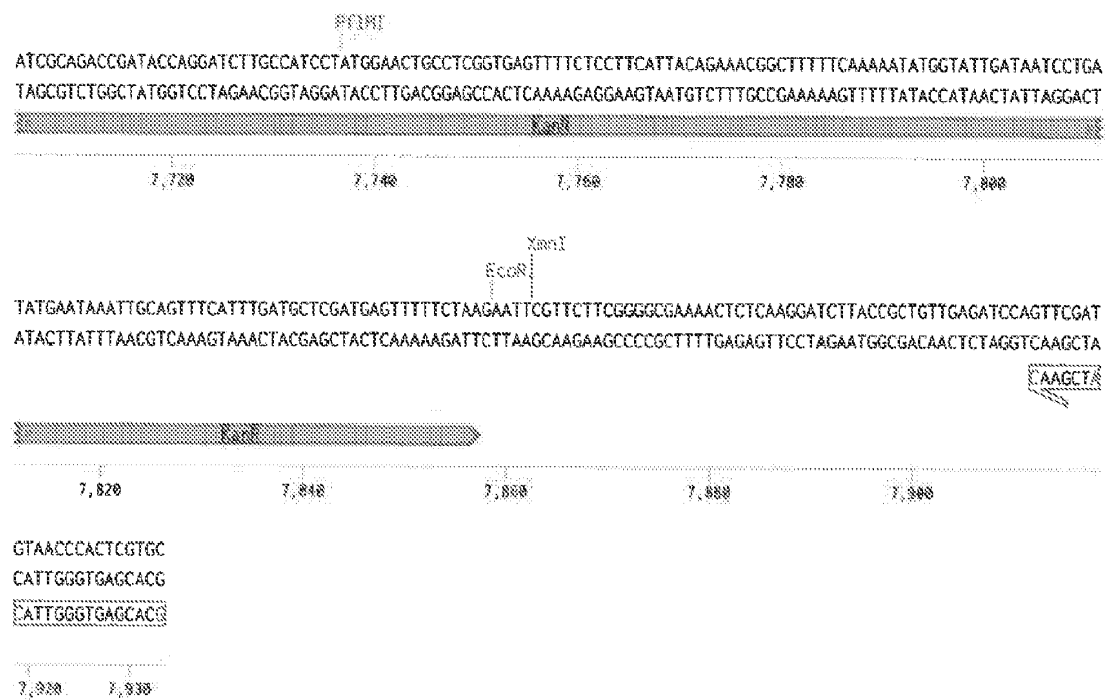


Figure 9M

pAAV.CMV.GNE.miniRES.sHB-IGF1 KanR (7933 bp) (from 7063-7704 bp)



pAAV.CMV.GNE.miniIRES.sHB-IGF1 KanR (7933 bp) (from 7705-7933 bp)



(from 1-535 bp)

pAAV.MCK.GNE.minIRES-FST344 KanR (8223 bp)

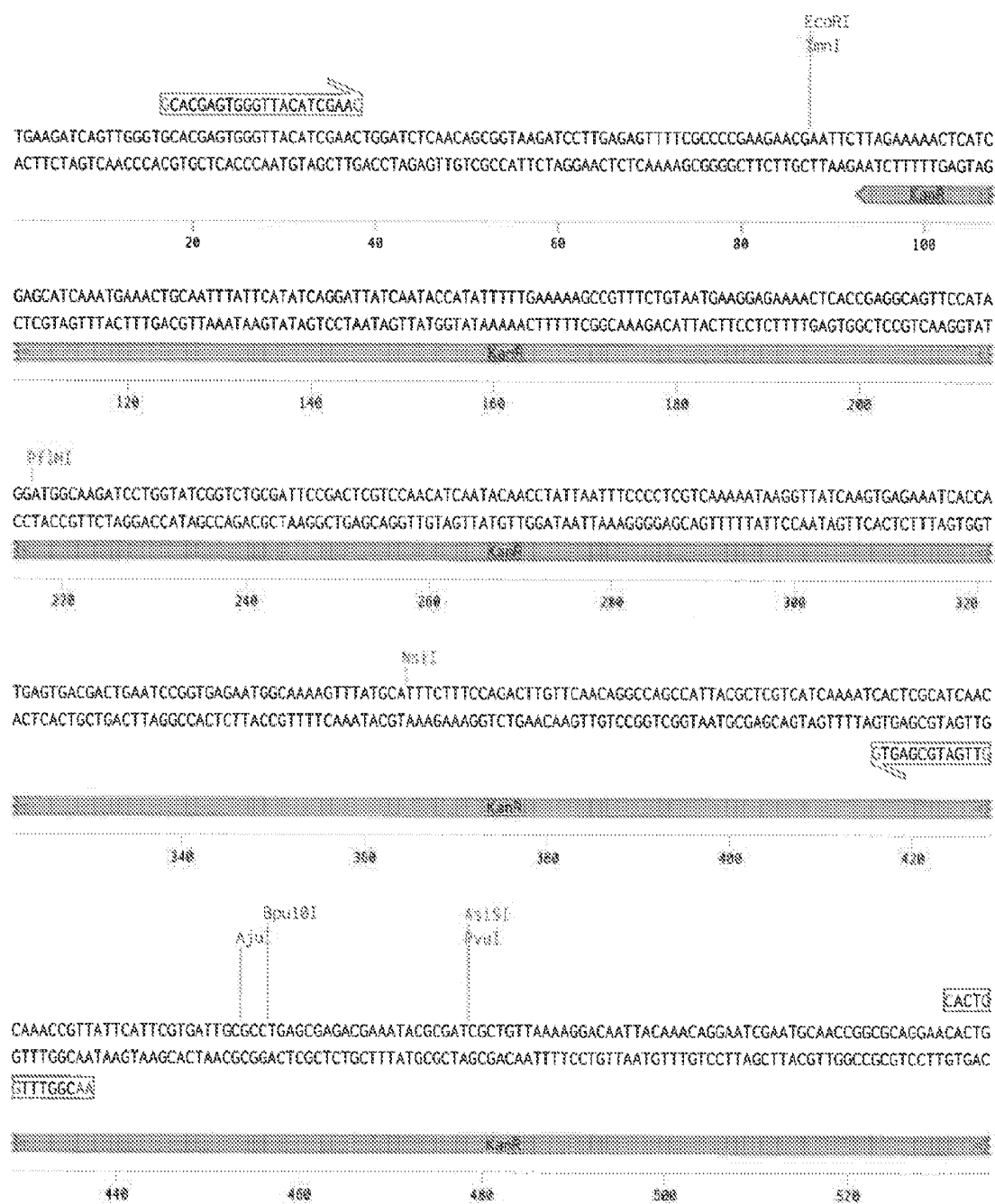


Figure 10B

pAAV.MCK.GNE.miniRES-FST344 KanR (8223 bp) (from 536-1284 bp)

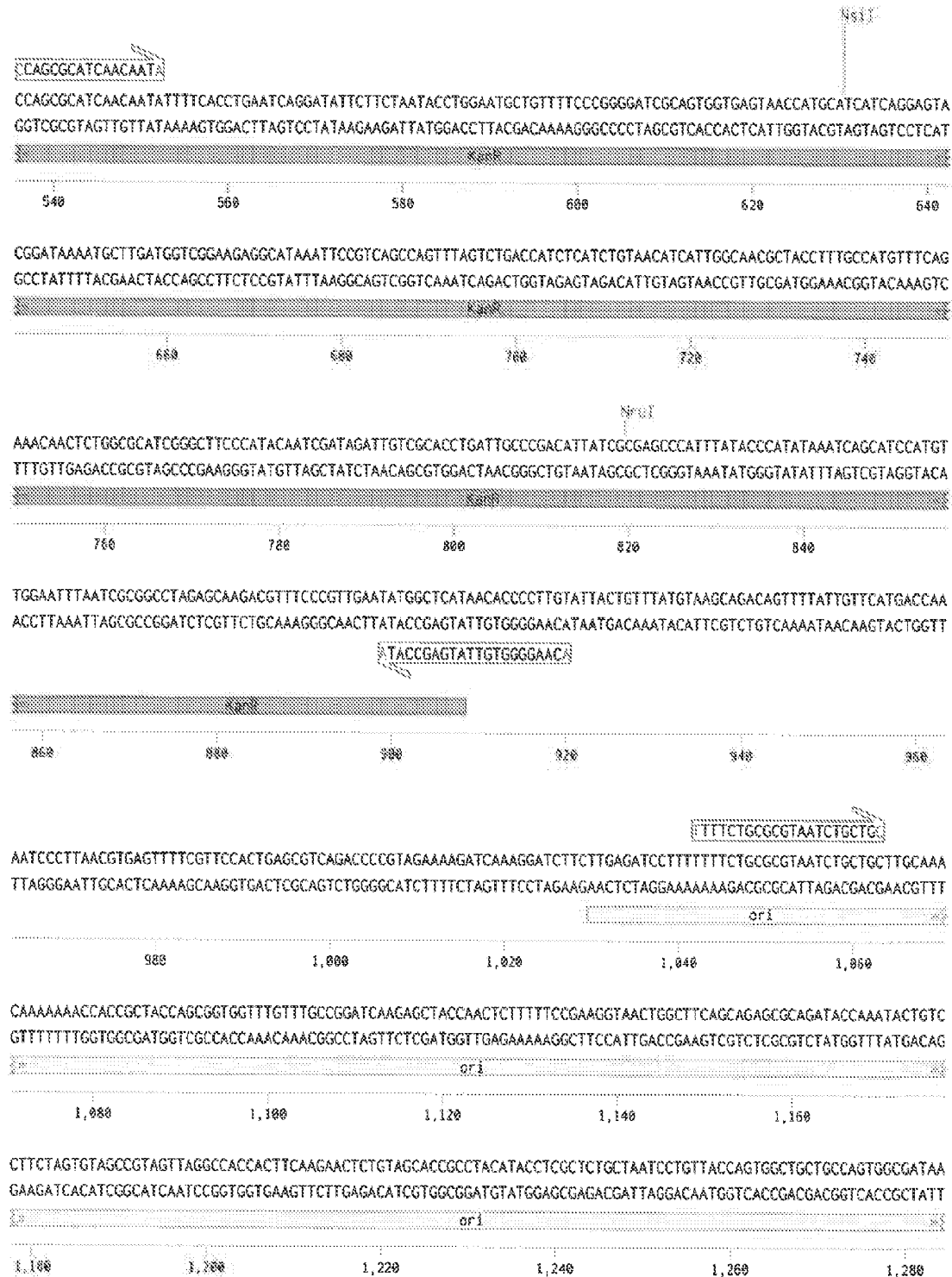


Figure 10C

pAAV.MCK.GNE.miniRES-FST344 KanR (8223 bp) (from 1285-2033 bp)

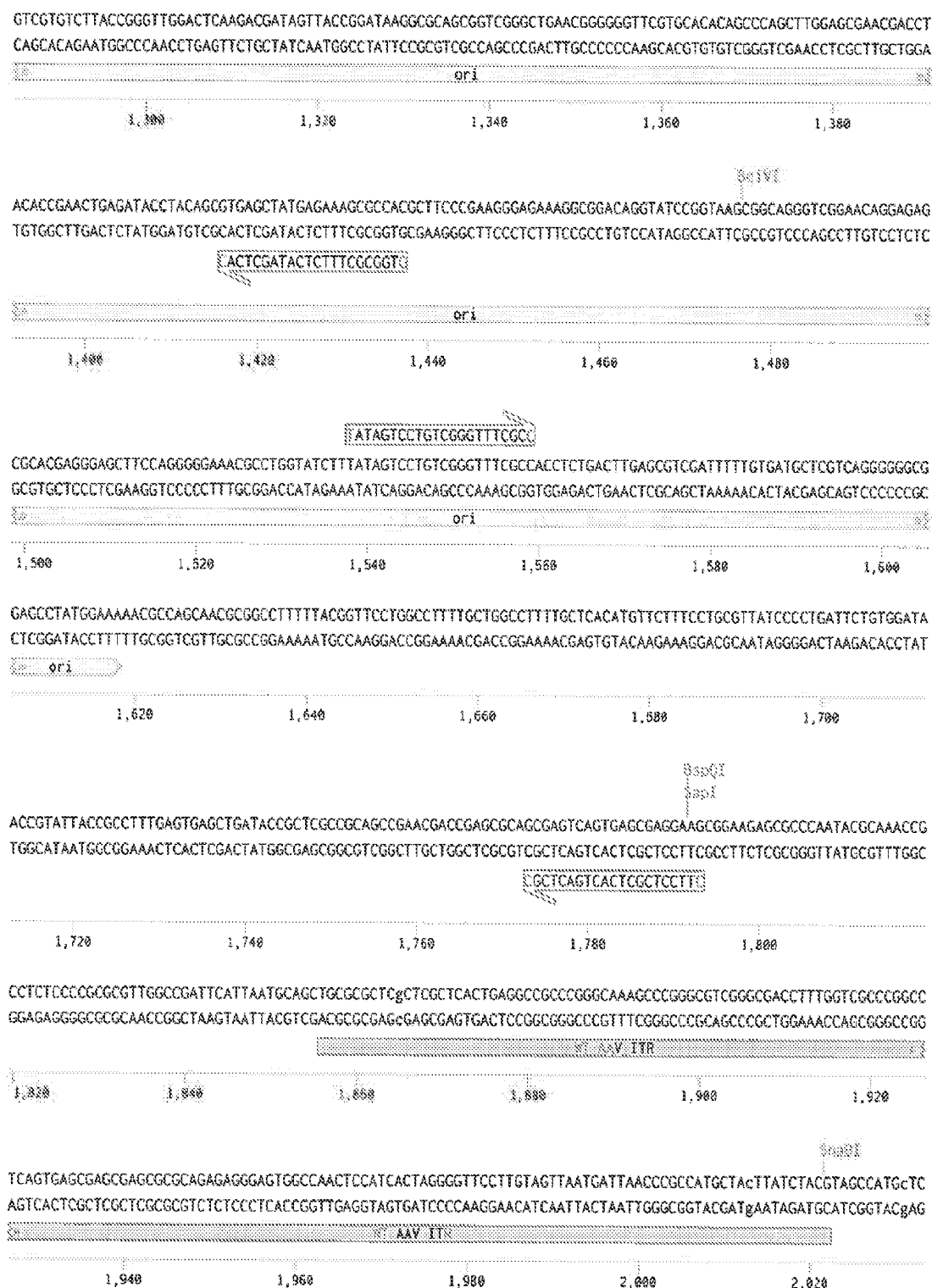


Figure 10D

pAAV.MCK.GNE.miniIRES-FST344 KanR (8223 bp) (from 2034-2675 bp)

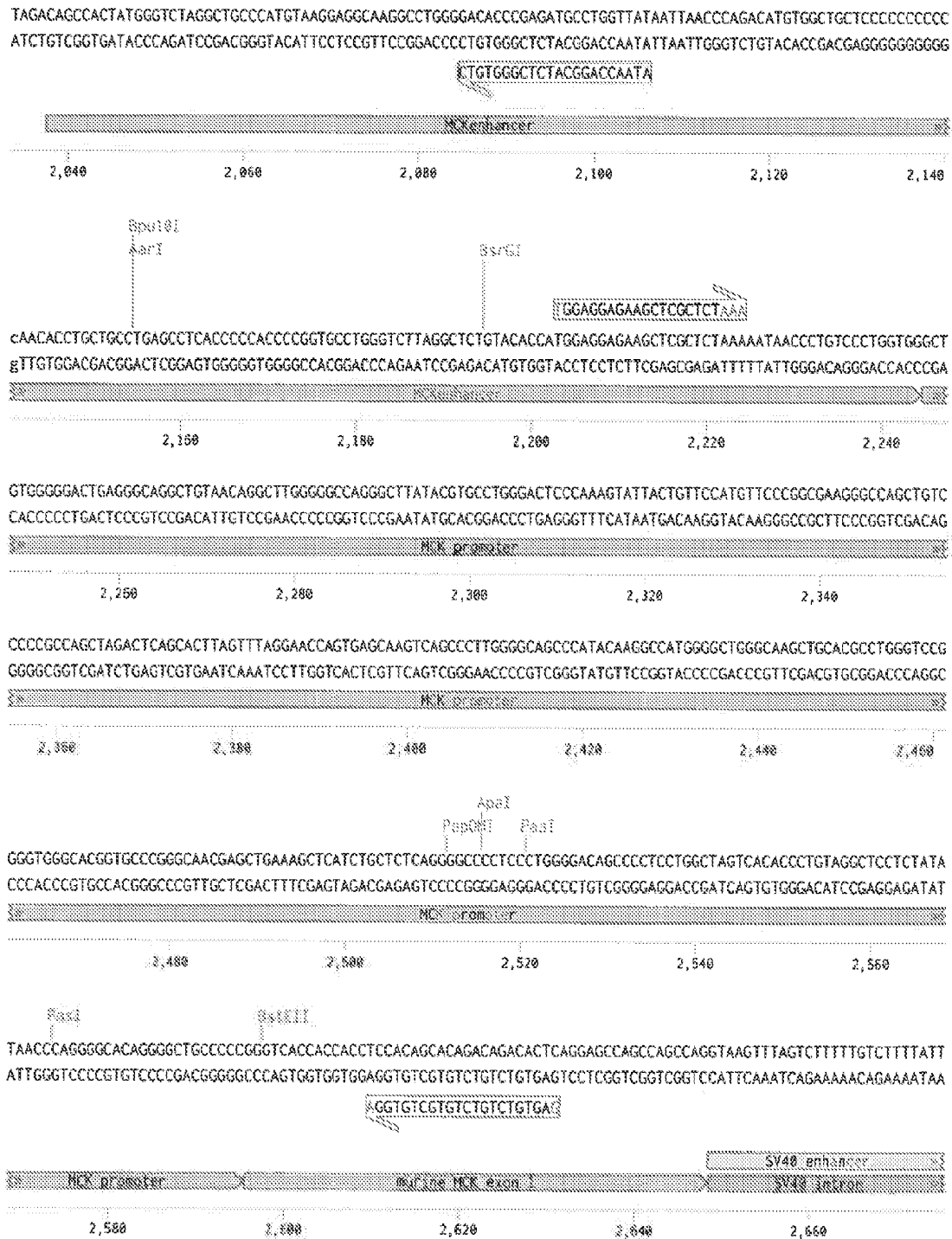


Figure 10 E

pAAV.MCK.GNE.miniRES-FST344 KanR (8223 bp) (from 2676-3210 bp)

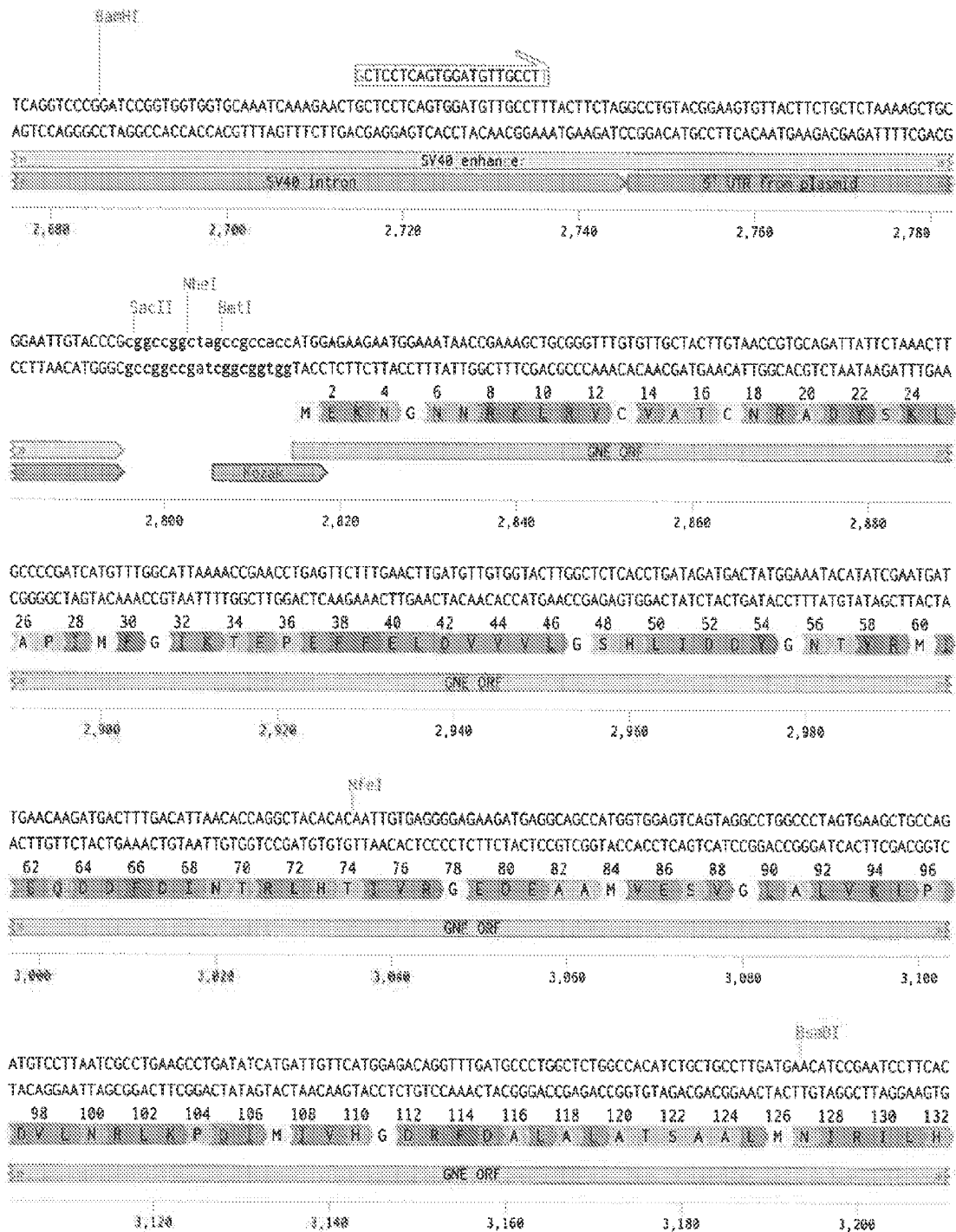


Figure 10F

pAAV.MCK.GNE.miniRES-FST344 KanR (8223 bp) (from 3211-3745 bp)

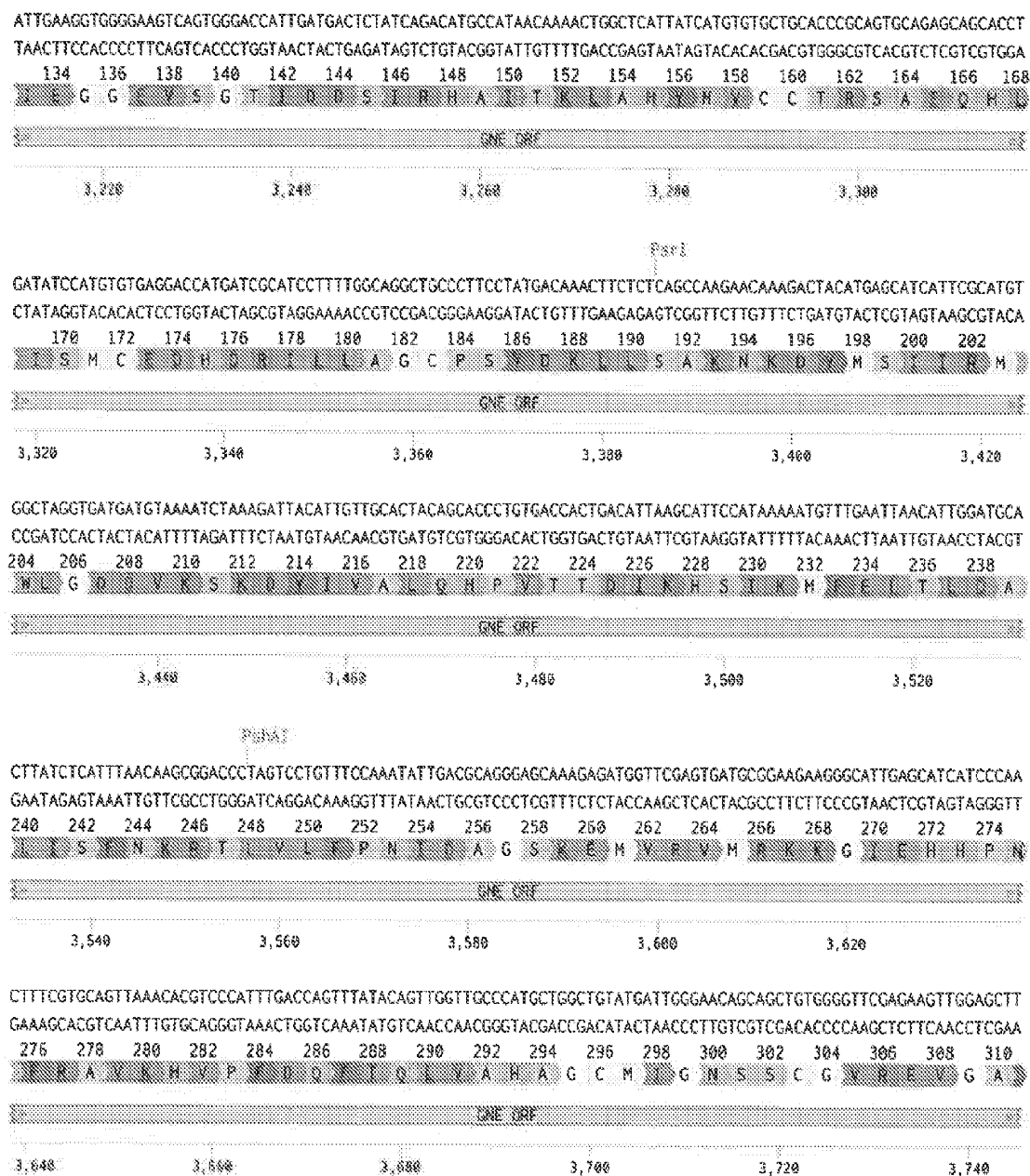
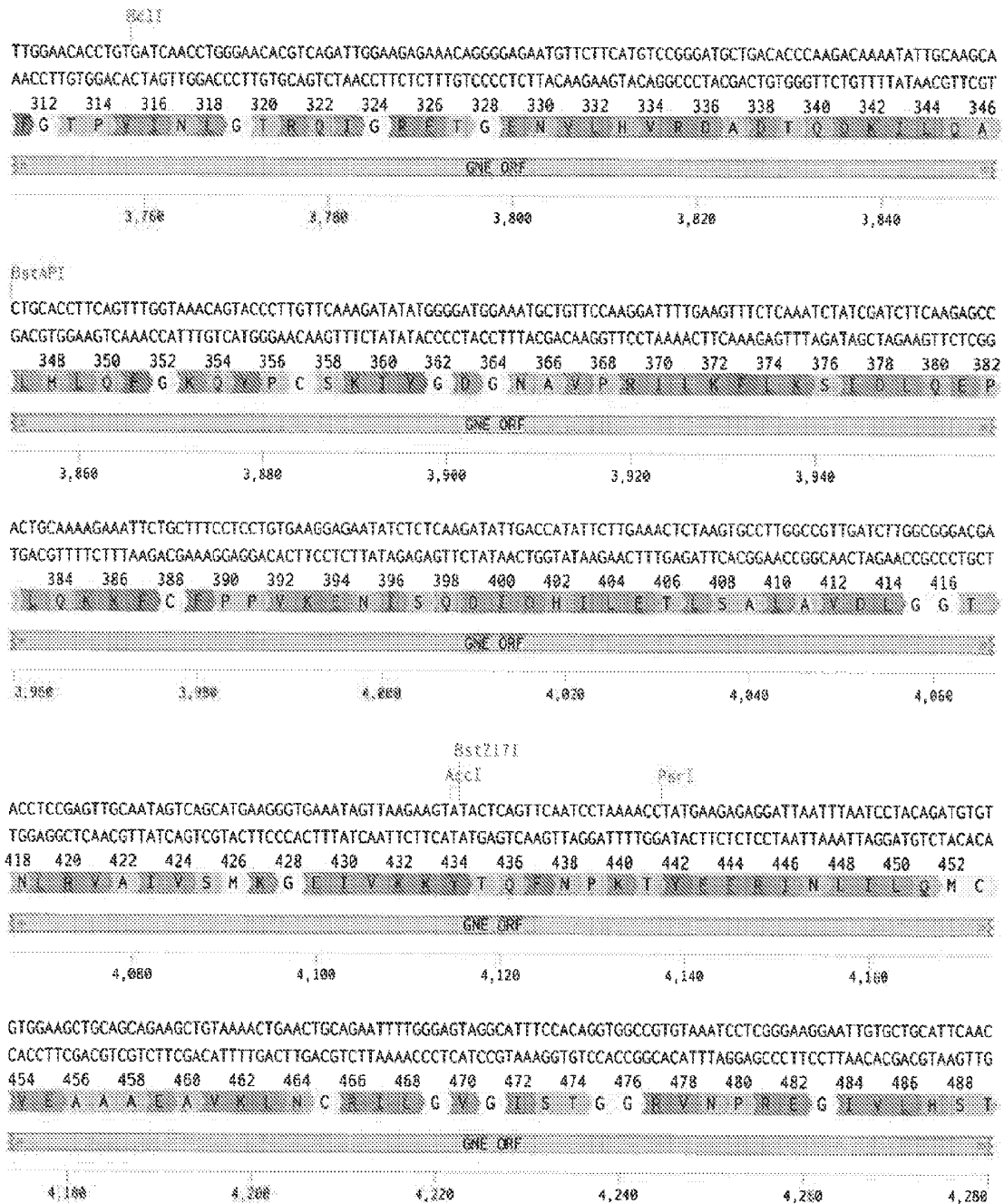


Figure 10G

pAAV.MCK.GNE.miniIRES-FST344 KanR (8223 bp) (from 3746-4280 bp)



pAAV.MCK.GNE.miniRES-FST344 KanR (8223 bp) (from 4281-4815 bp)

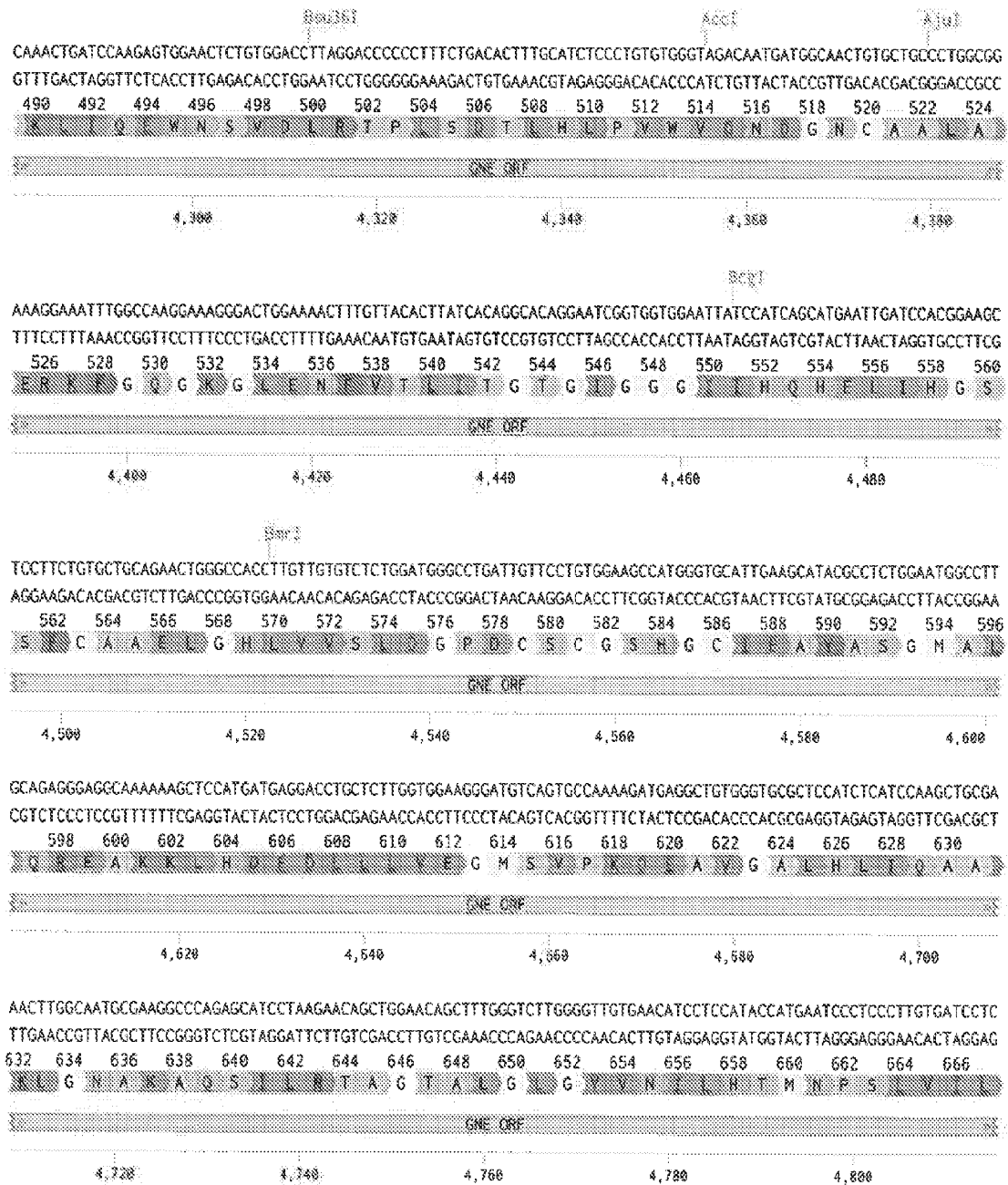


Figure 10I

pAAV.MCK.GNE.miniRES-FST344 KanR (8223 bp) (from 4816-5350 bp)

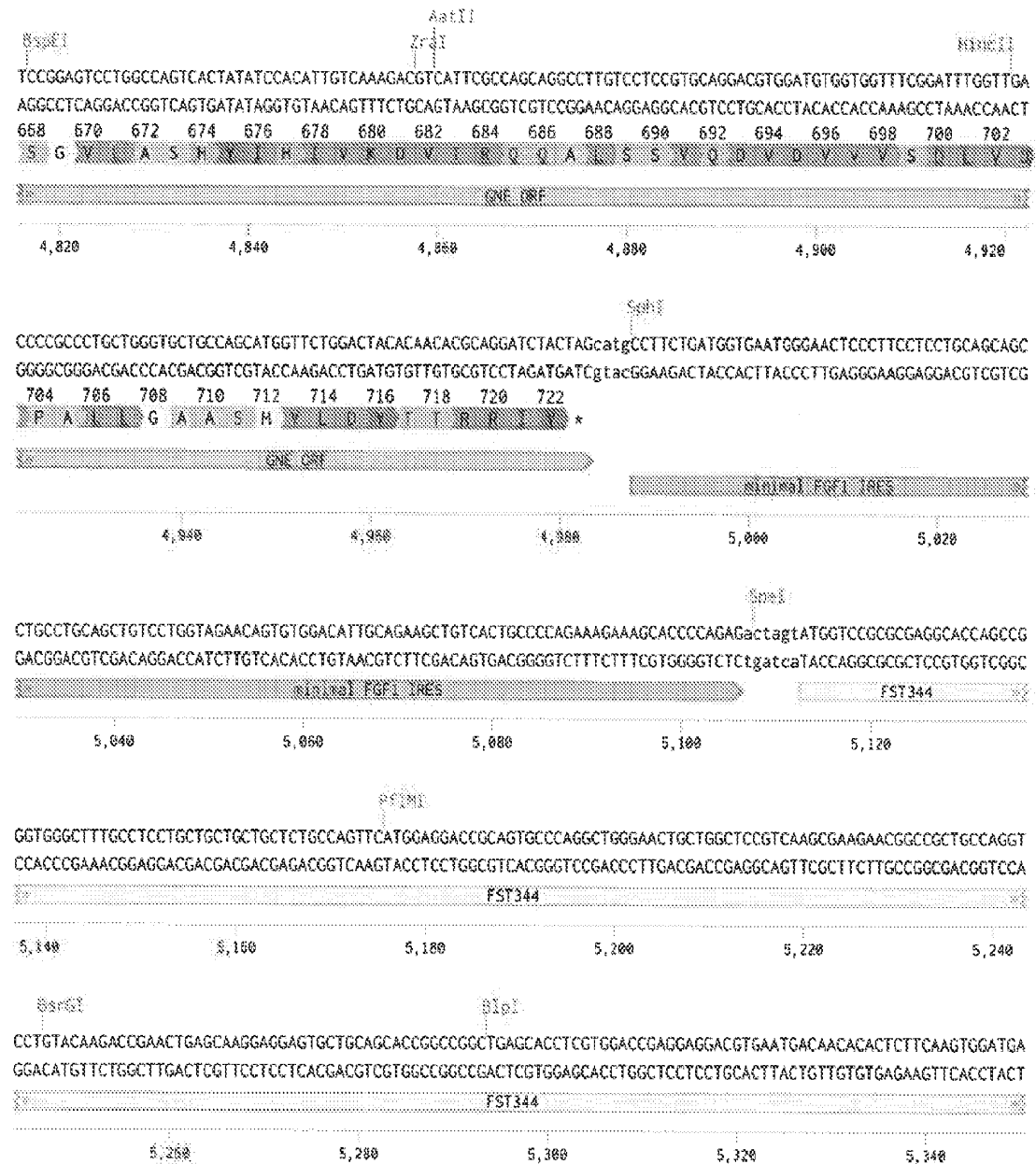
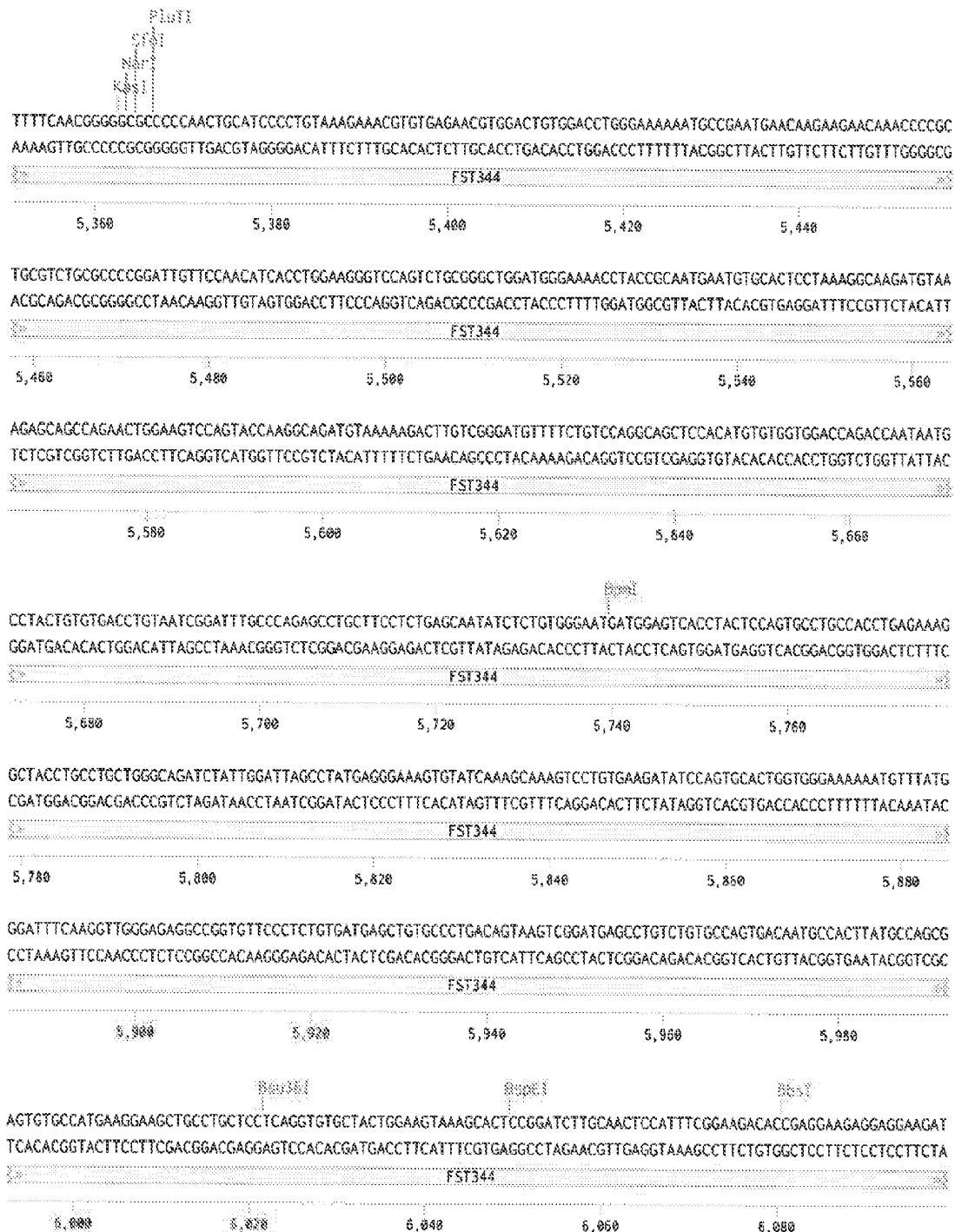
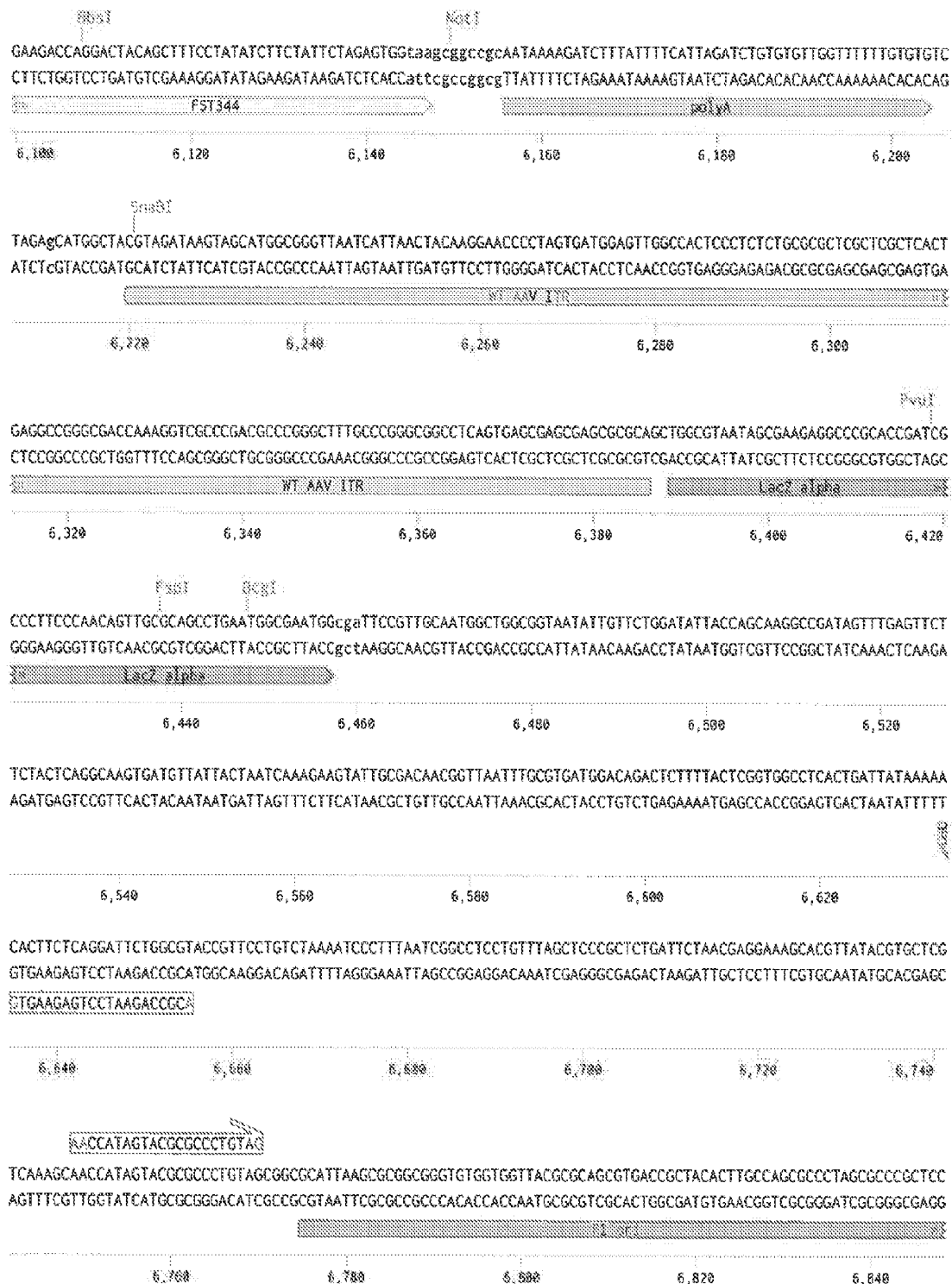


Figure 10J

pAAV.MCK.GNE.miniRES-FST344 KanR (8223 bp) (from 5351-6099 bp)



pAAV.MCK.GNE.miniRES-F5T344 KanR (8223 bp) (from 6100-6848 bp)



pAAV.MCK.GNE.miniRES-FST344 KanR (8223 bp) (from 6849-7597 bp)

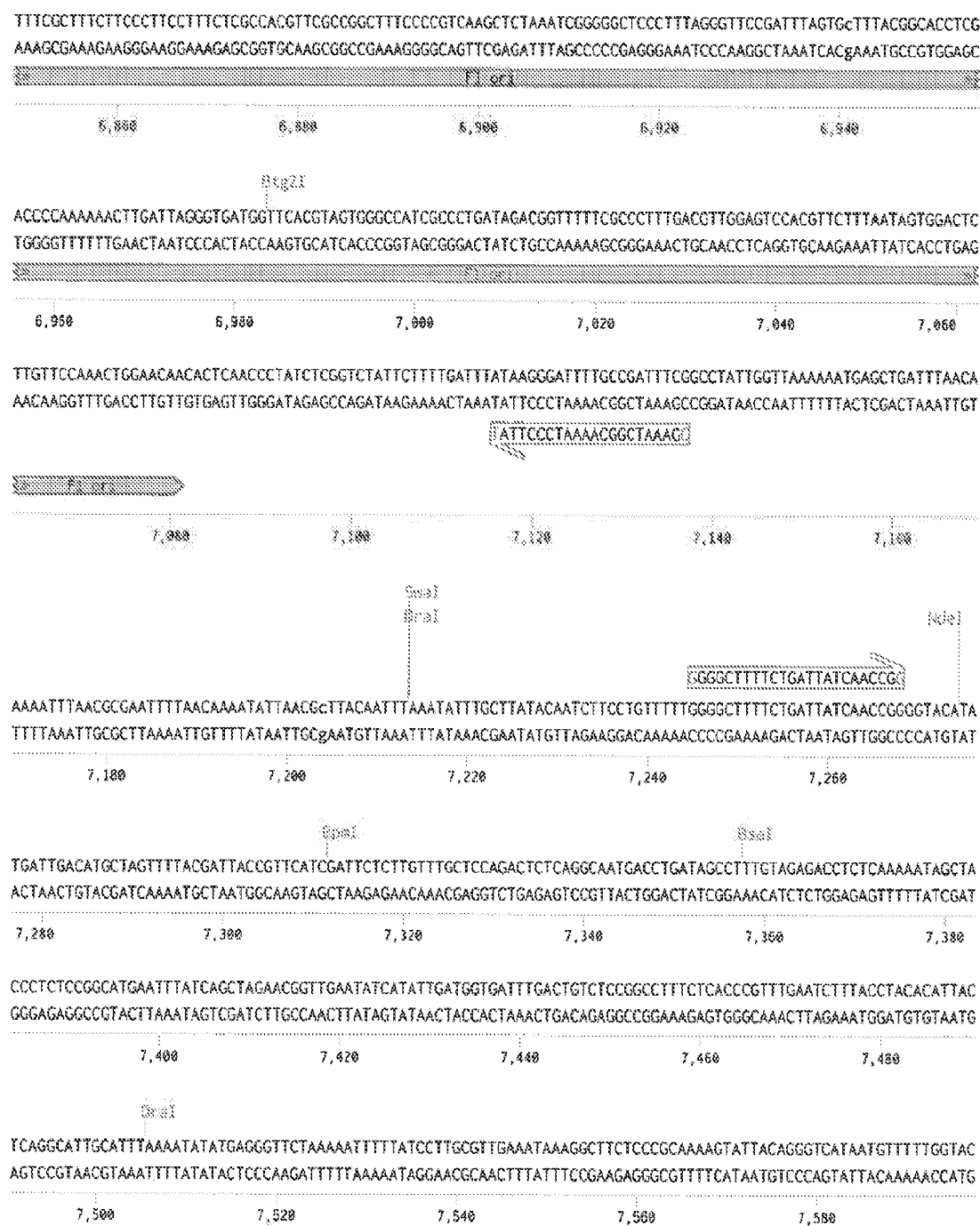


Figure 10M

pAAV.MCK.GNE.miniRES-FST344 KanR (8223 bp) (from 7598-8223 bp)

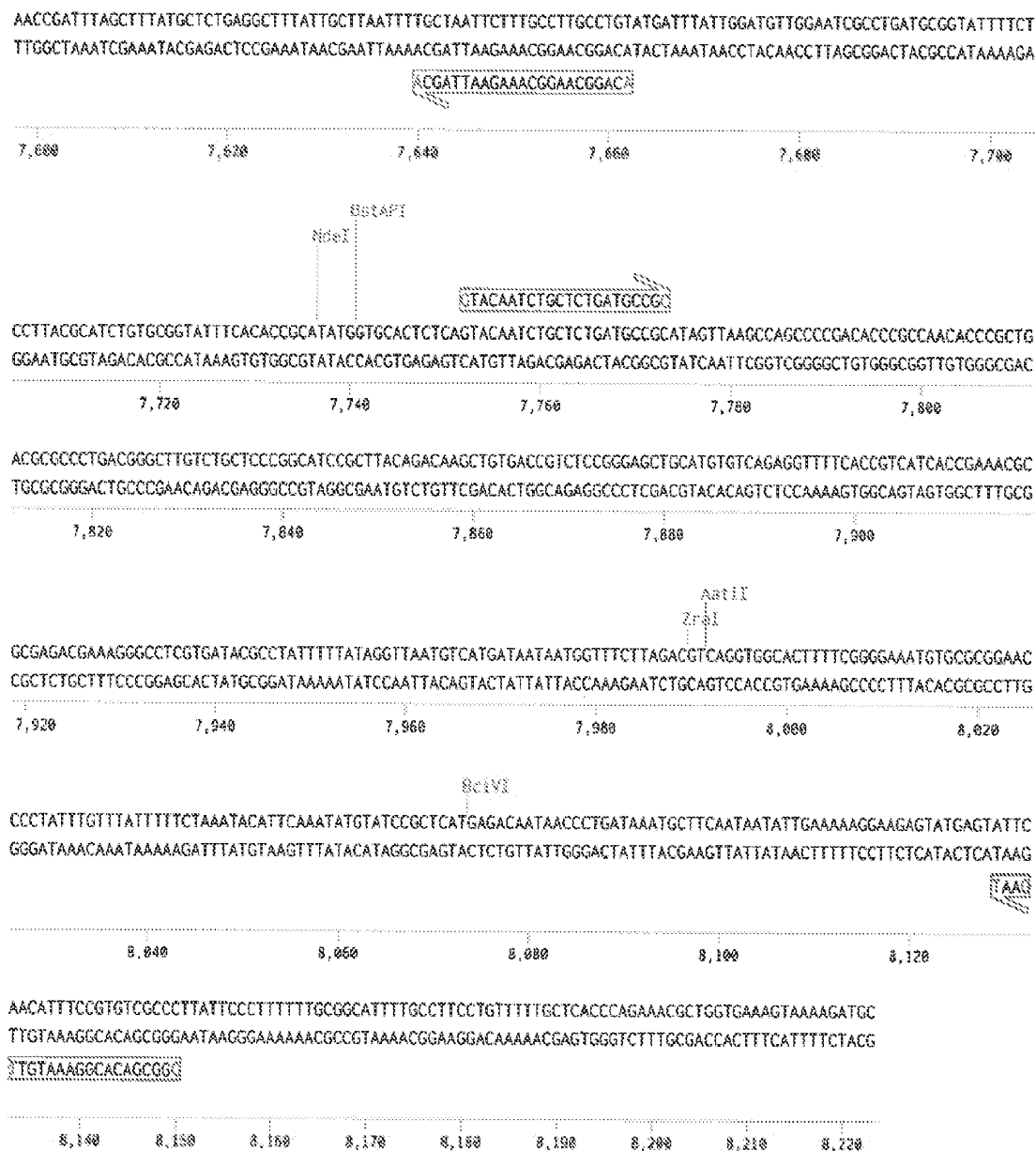


Figure 11A

(from 1-535 bp)

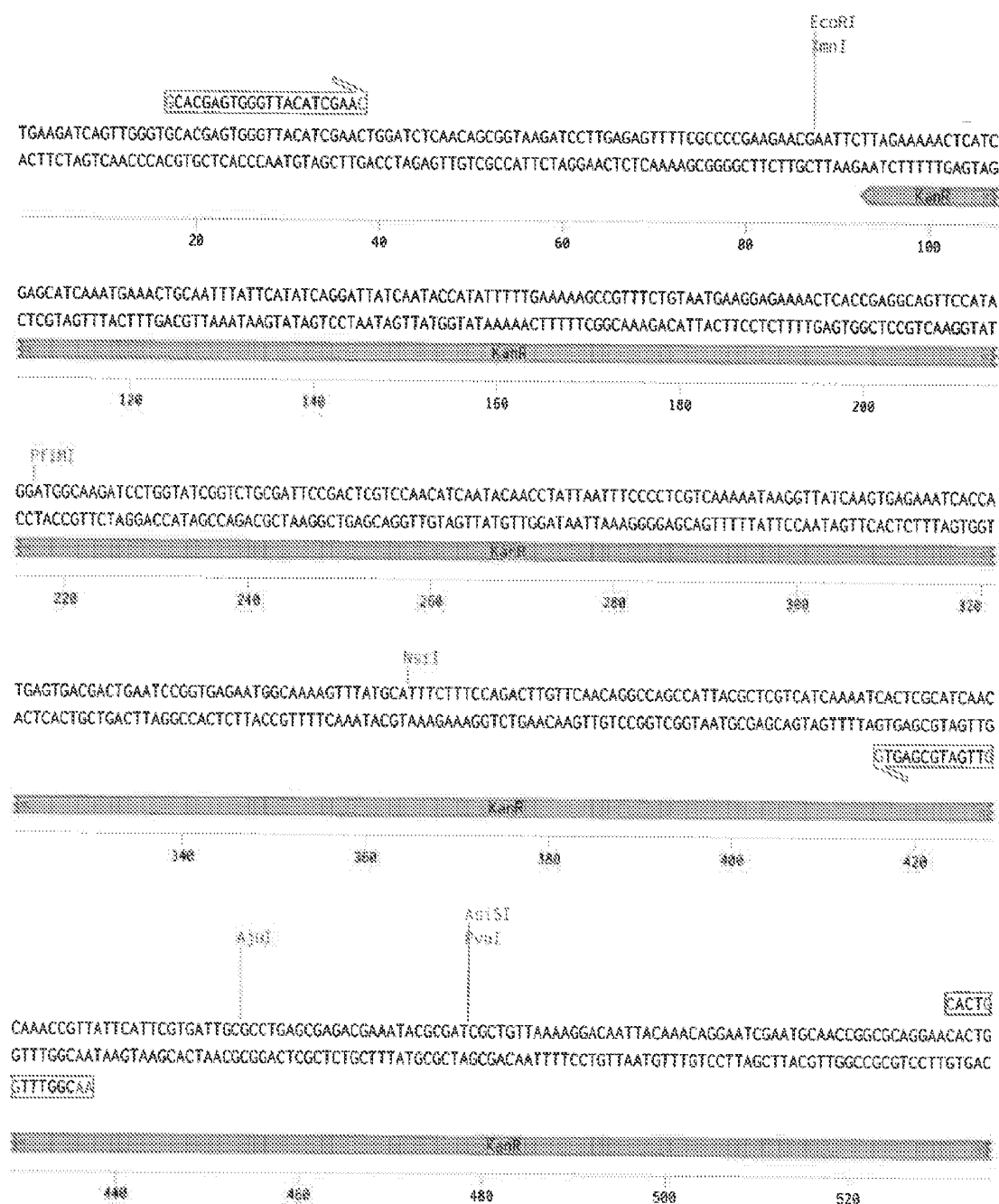
pAAV.MCK.GNE.minIRES.sHB-IGF1 KanR (7726 bp)

Figure 11B

pAAV.MCK.GNE.miniRES.sHB-IGF1 KanR (7726 bp) (from 536-1284 bp)

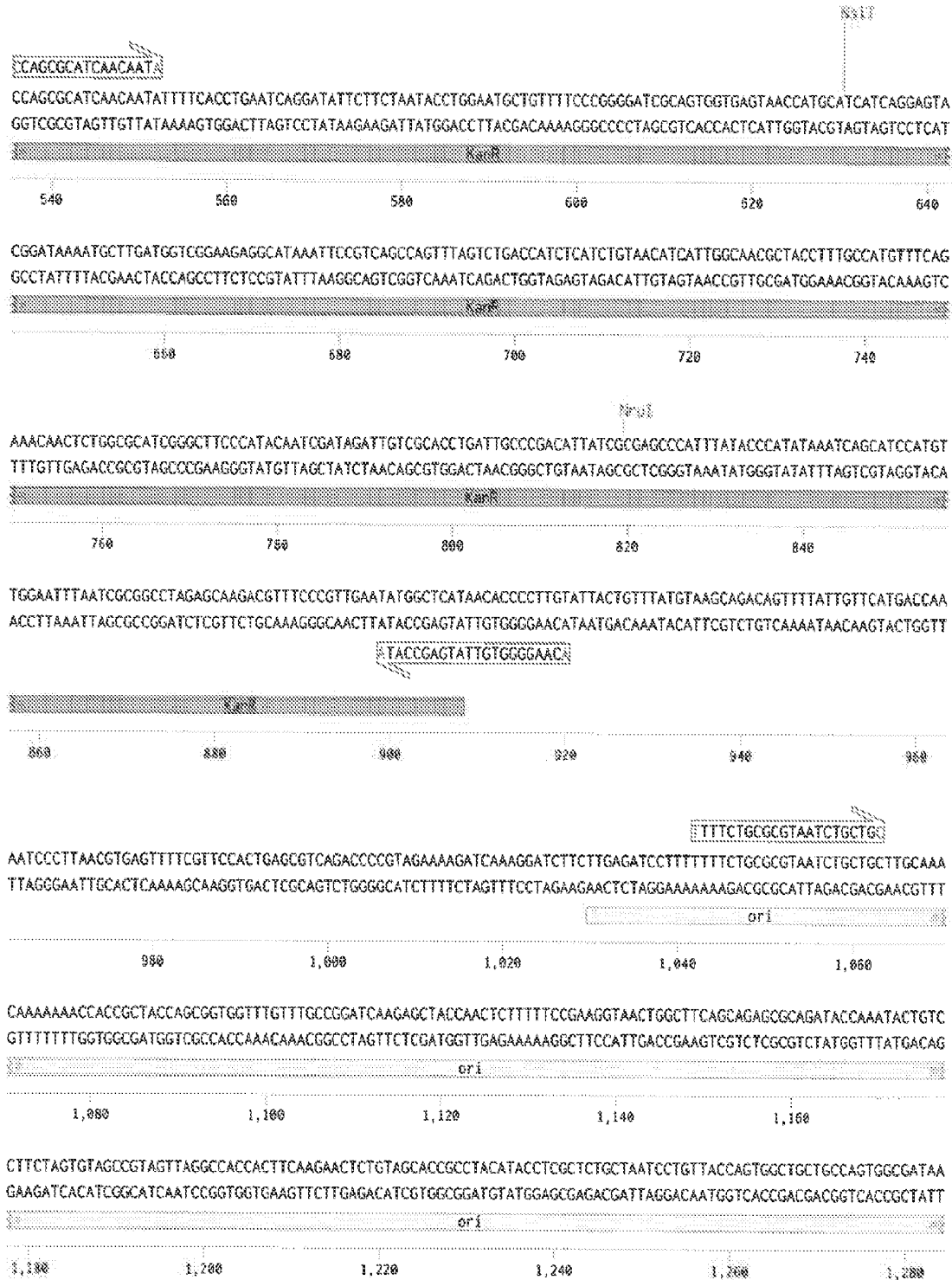


Figure 11C

pAAV.MCK.GNE.miniRES.sHB-IGF1 KanR (7726 bp) (from 1285-1926 bp)

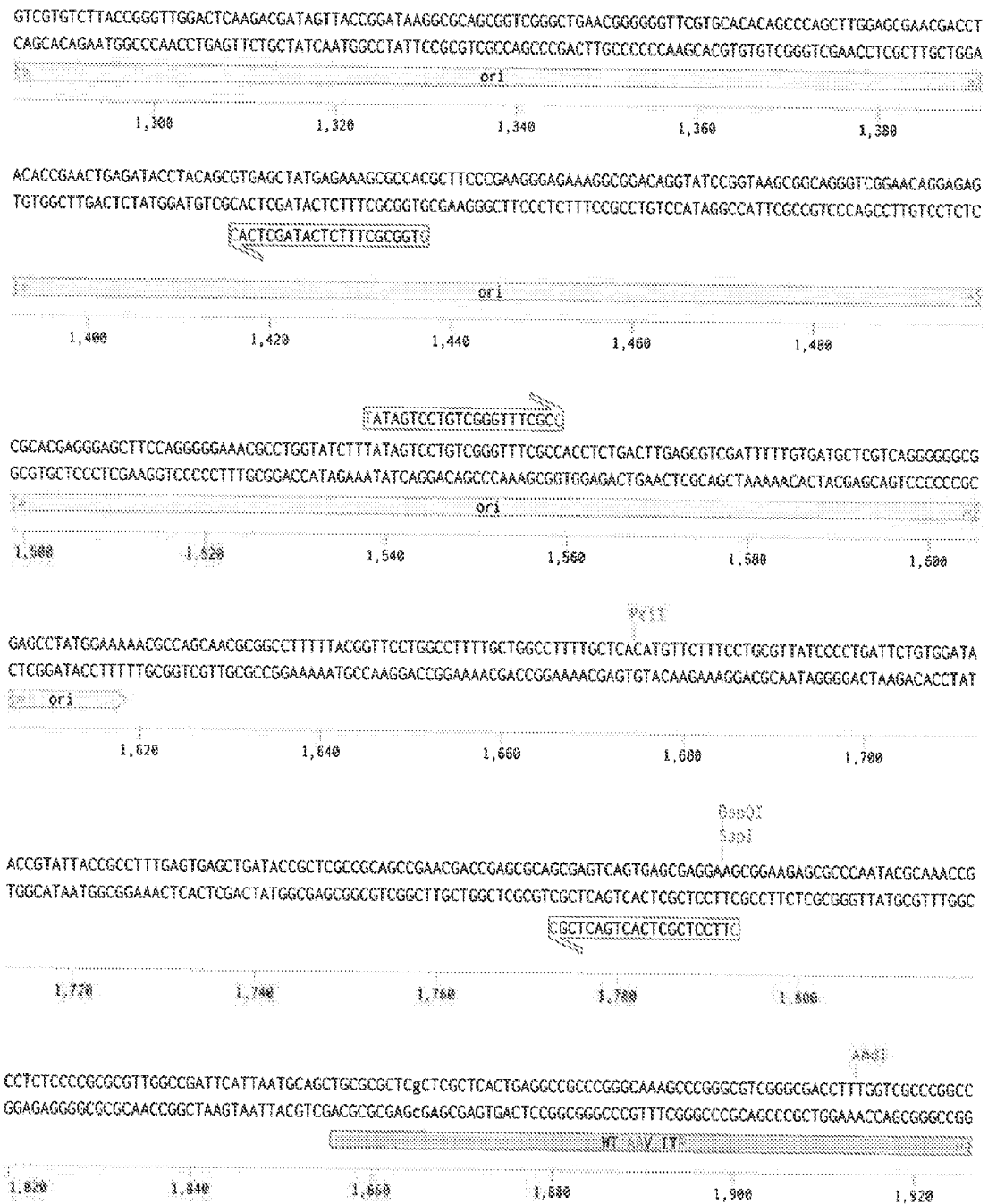


Figure 11D

pAAV.MCK.GNE.miniRES.shB-IGF1 KanR (7726 bp) (from 1927-2568 bp)

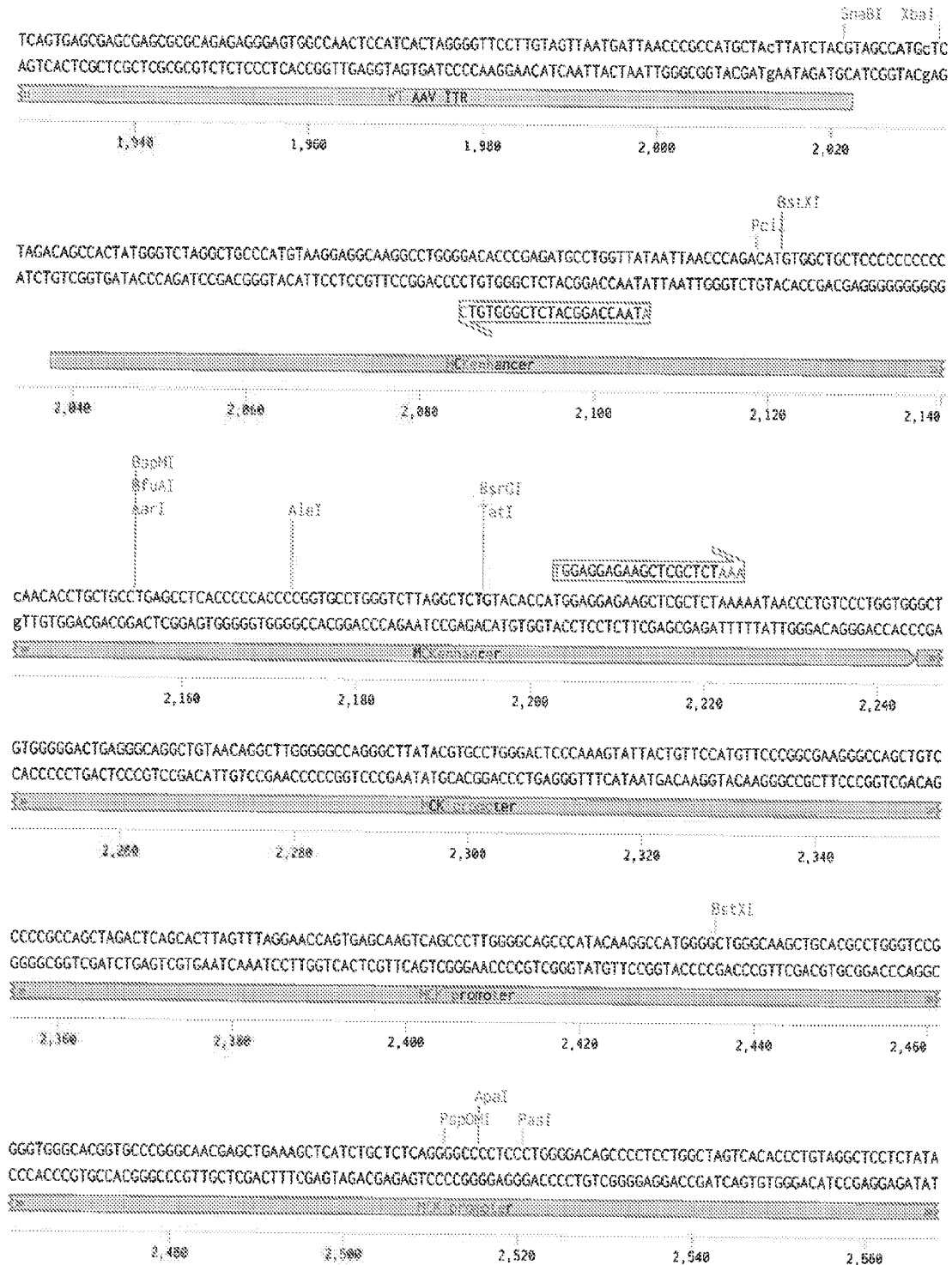


Figure 11E

pAAV.MCK.GNE.miniIRES.sHB-IGF1 KanR (7726 bp) (from 2569-3103 bp)

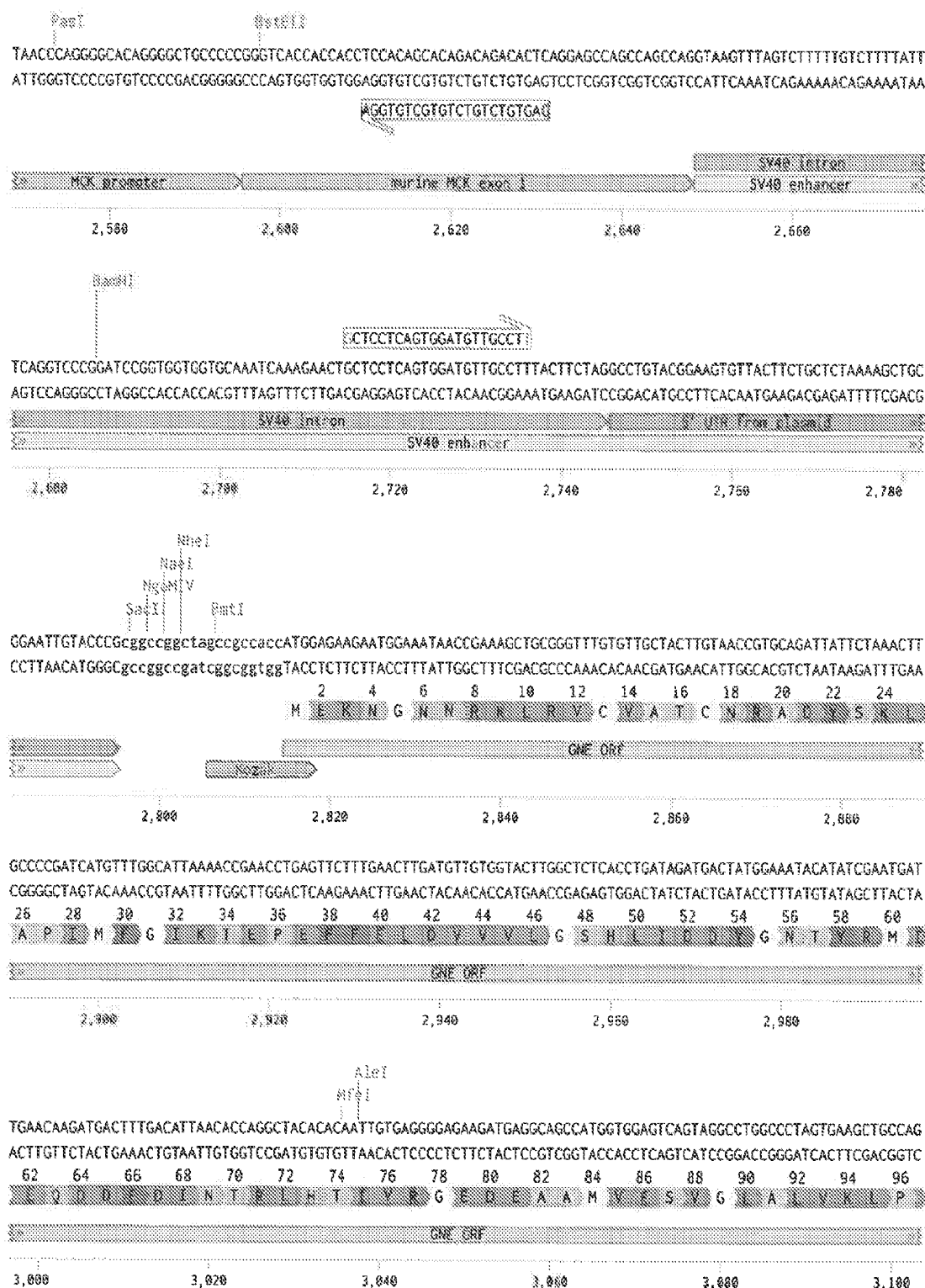


Figure 11F

pAAV.MCK.GNE.miniRES.shB-IGF1 KanR (7726 bp) (from 3104-3638 bp)

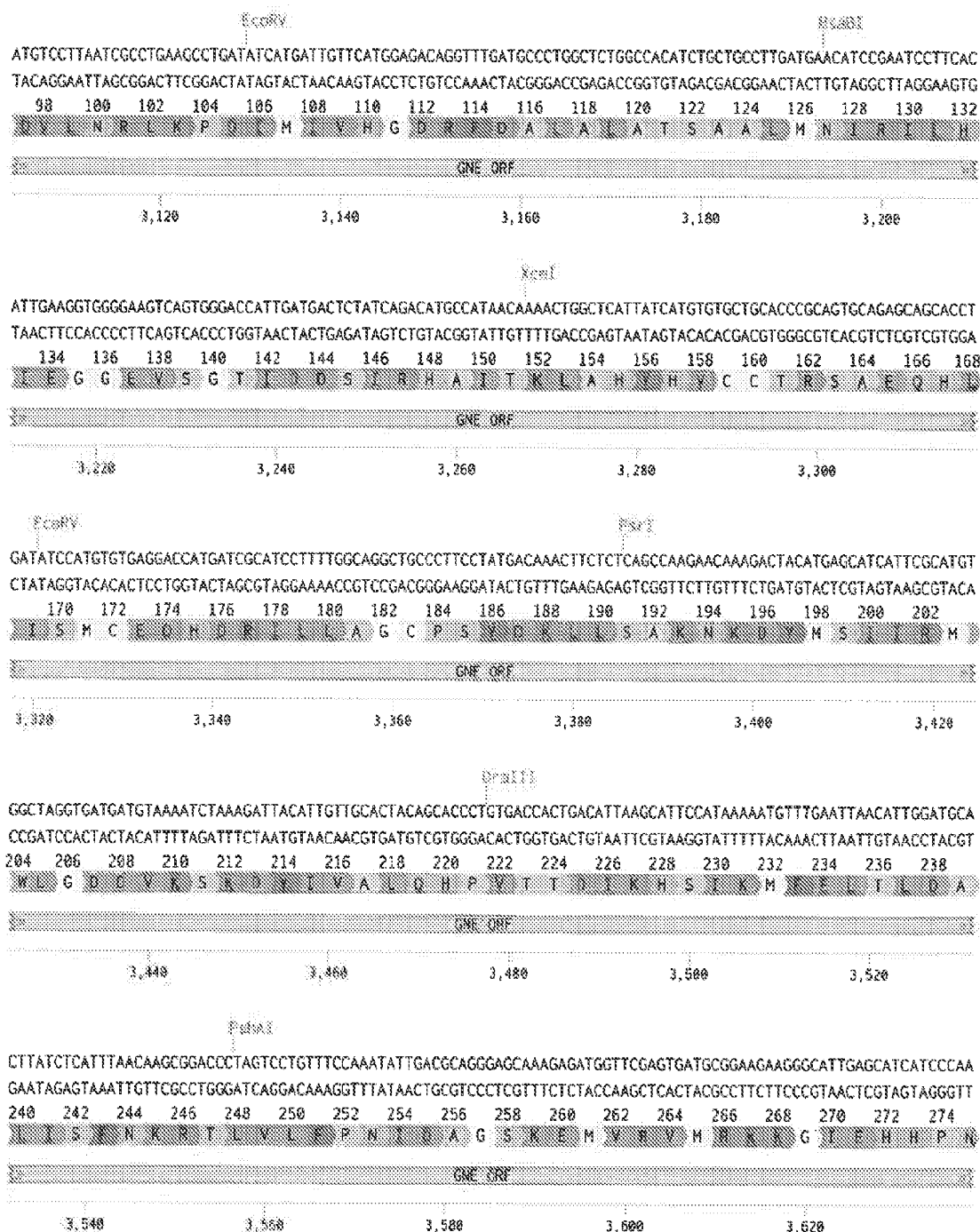


Figure 11G

pAAV.MCK.GNE.miniRES.sHB-IGF1 KanR (7726 bp) (from 3639-4173 bp)

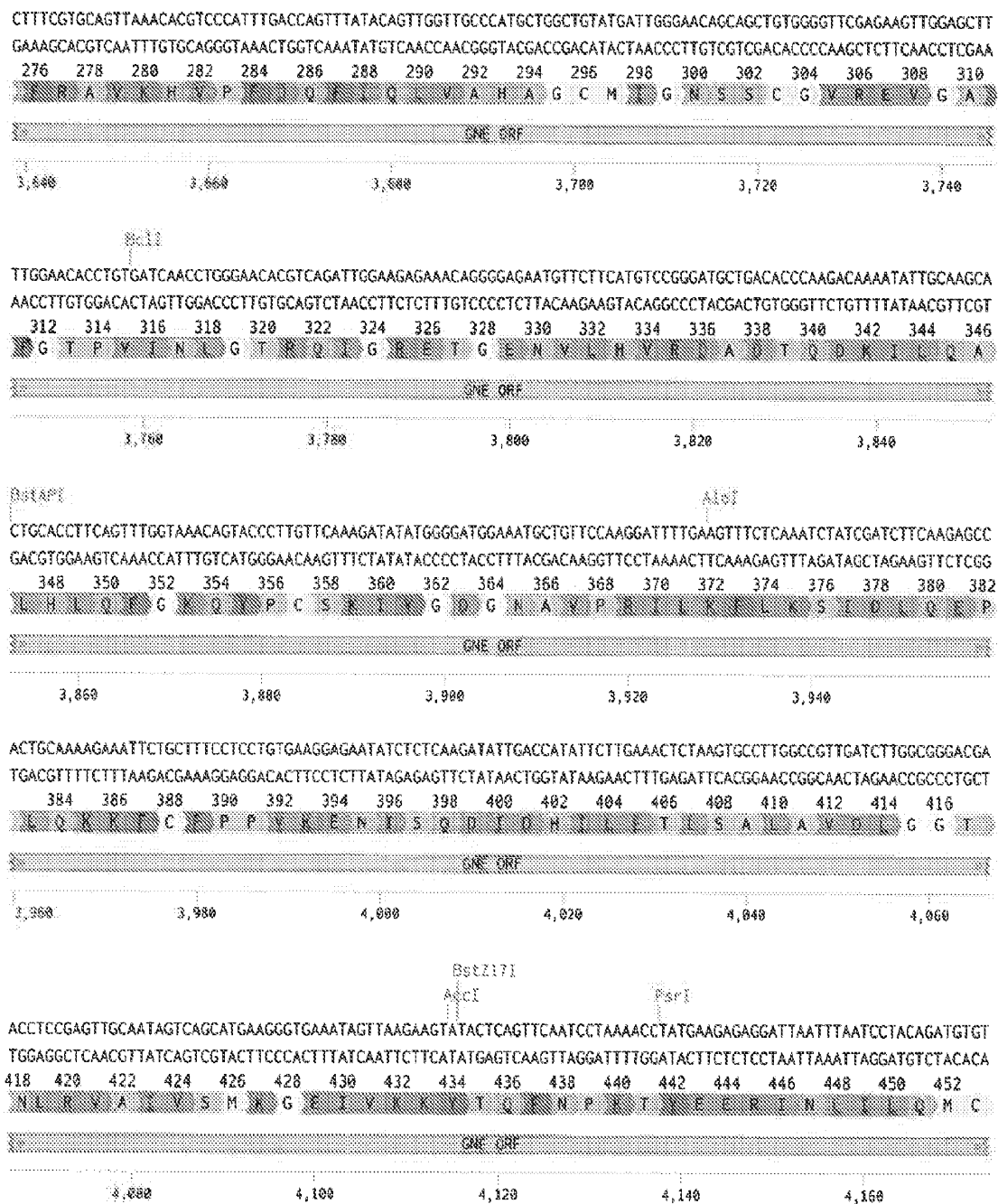


Figure 11H

pAAV.MCK.GNE.miniRES.sHB-IGF1 KanR (7726 bp) (from 4174-4708 bp)

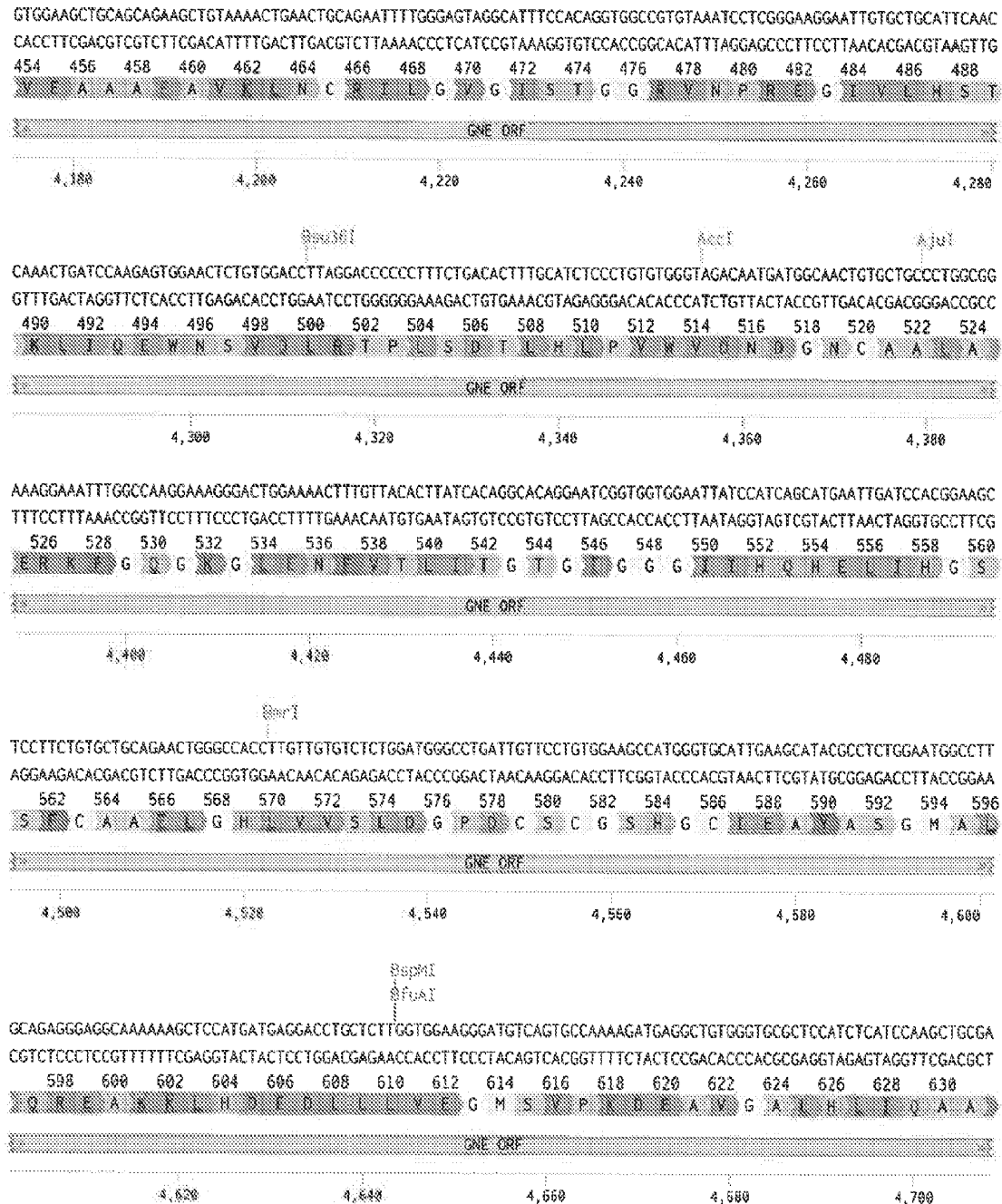


Figure 111

pAAV.MCK.GNE.miniIRES.sHB-IGF1 KanR (7726 bp) (from 4709-5243 bp)

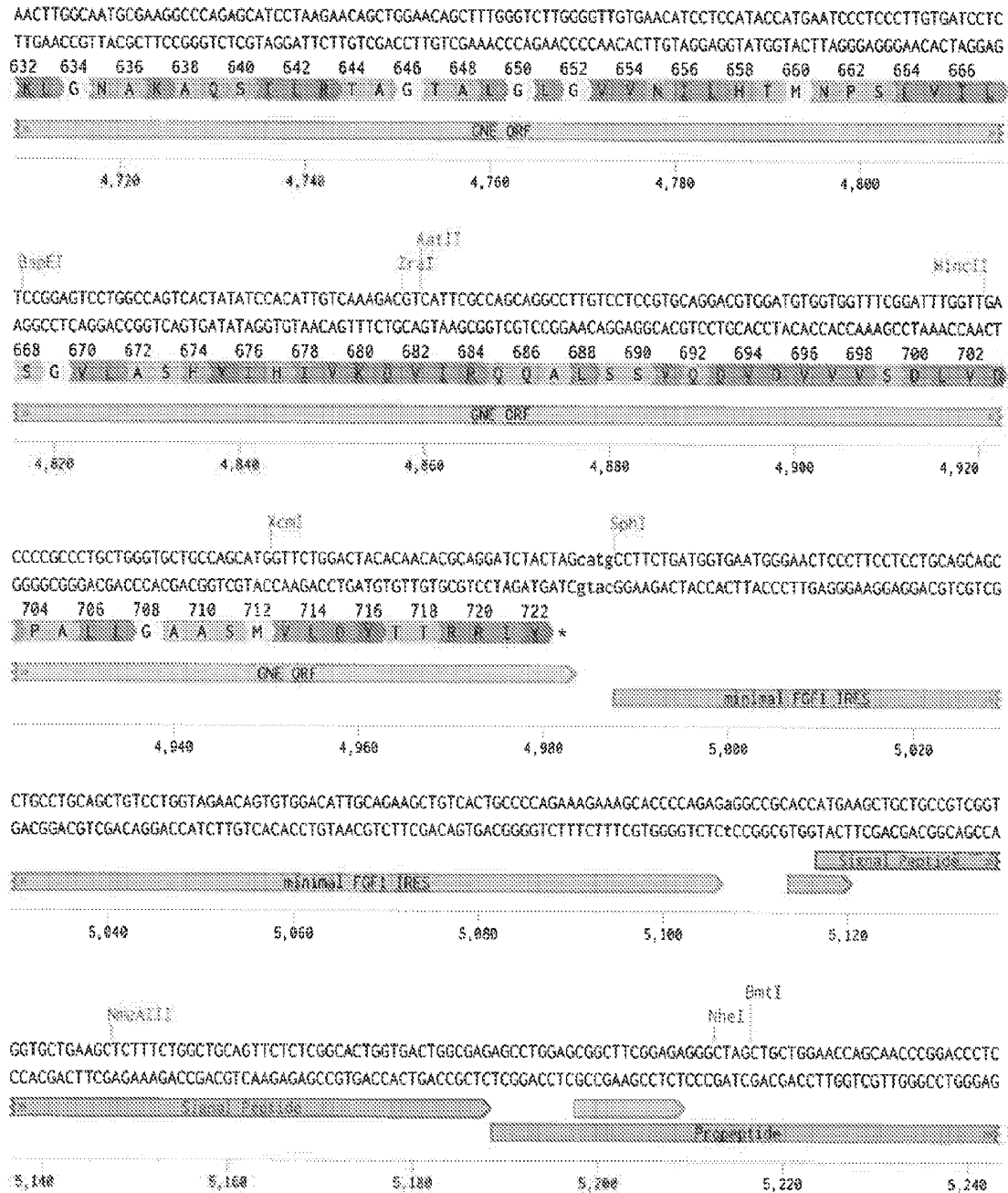


Figure 11J

pAAV.MCK.GNE.miniRES.sHB-IGF1 KanR (7726 bp) (from 5244-5778 bp)

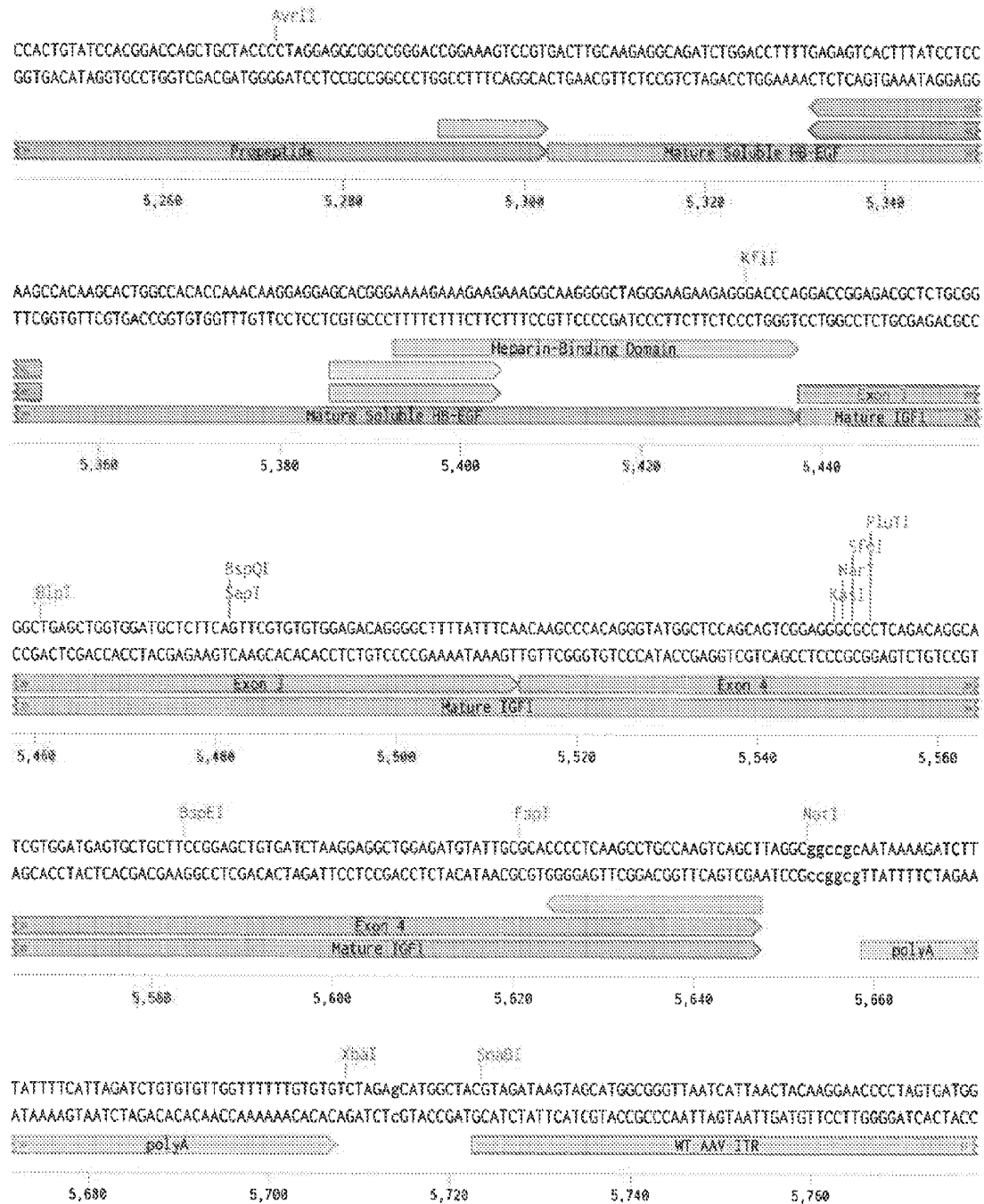


Figure 11K

pAAV.MCK.GNE.miniRES.sHB-IGF1 KanR (7726 bp) (from 5779-6527 bp)

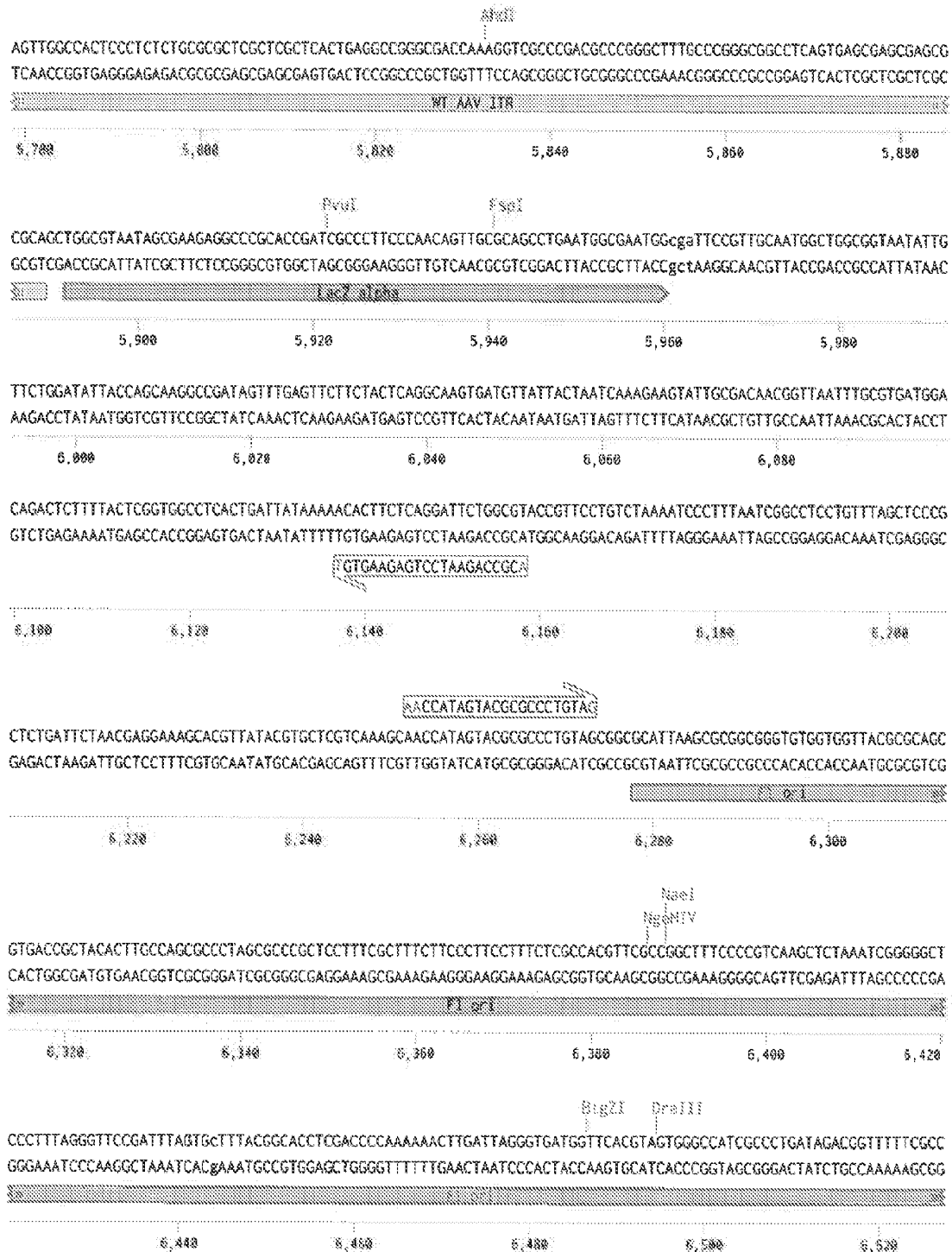


Figure 11L

pAAV.MCK.GNE.miniRES.shB-IGF1 KanR (7726 bp) (from 6528-7169 bp)

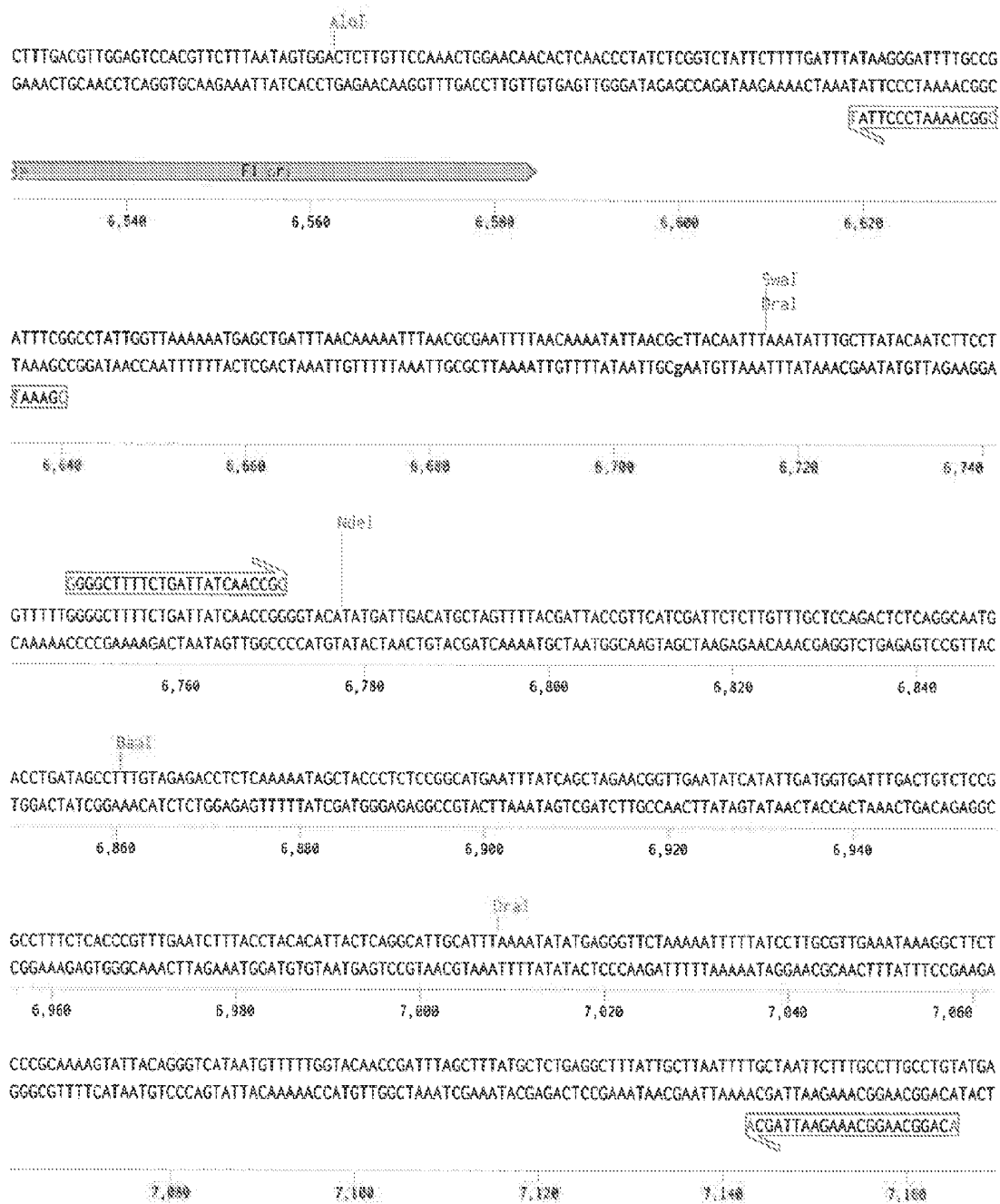
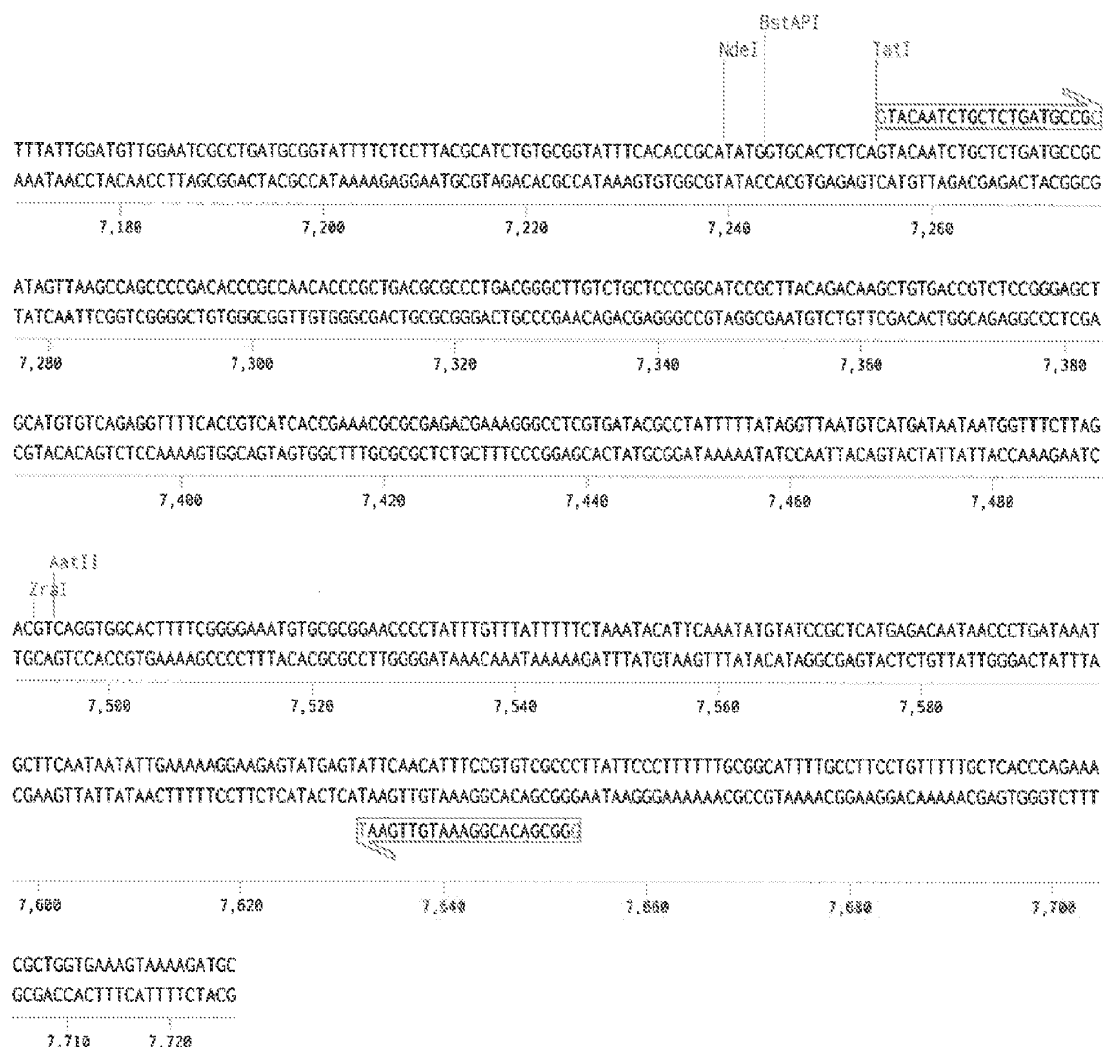


Figure 11M

pAAV.MCK.GNE.miniRES.sHB-IGF1 KanR (7726 bp) (from 7170-7726 bp)



(from 1-535 bp)

pAAV.GNEpro.GNE.miniIRES-FST344 KanR (8340 bp)

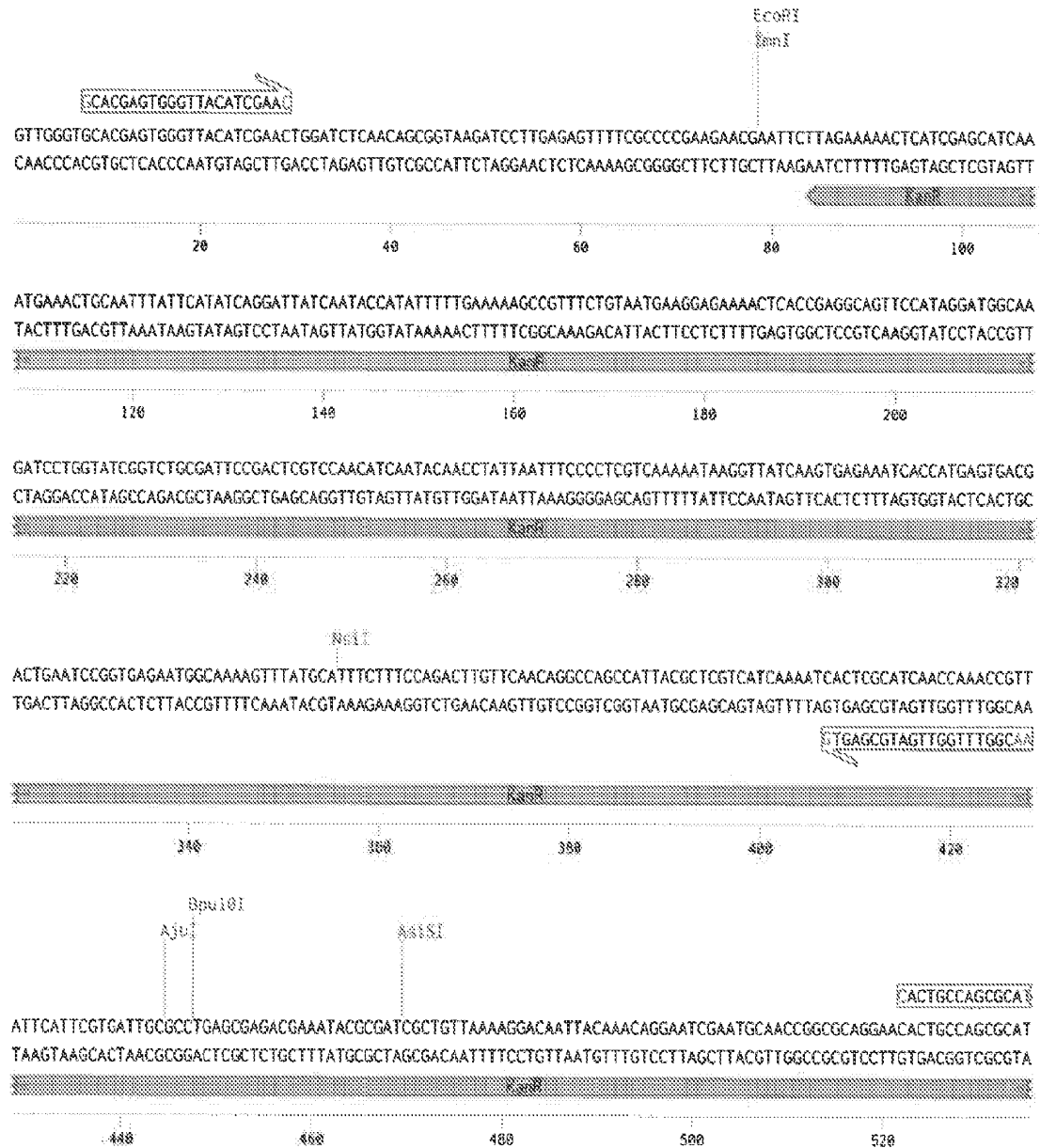


Figure 12B

pAAV.GNEpro.GNE.miniRES-FST344 KanR (8340 bp) (from 536-1284 bp)

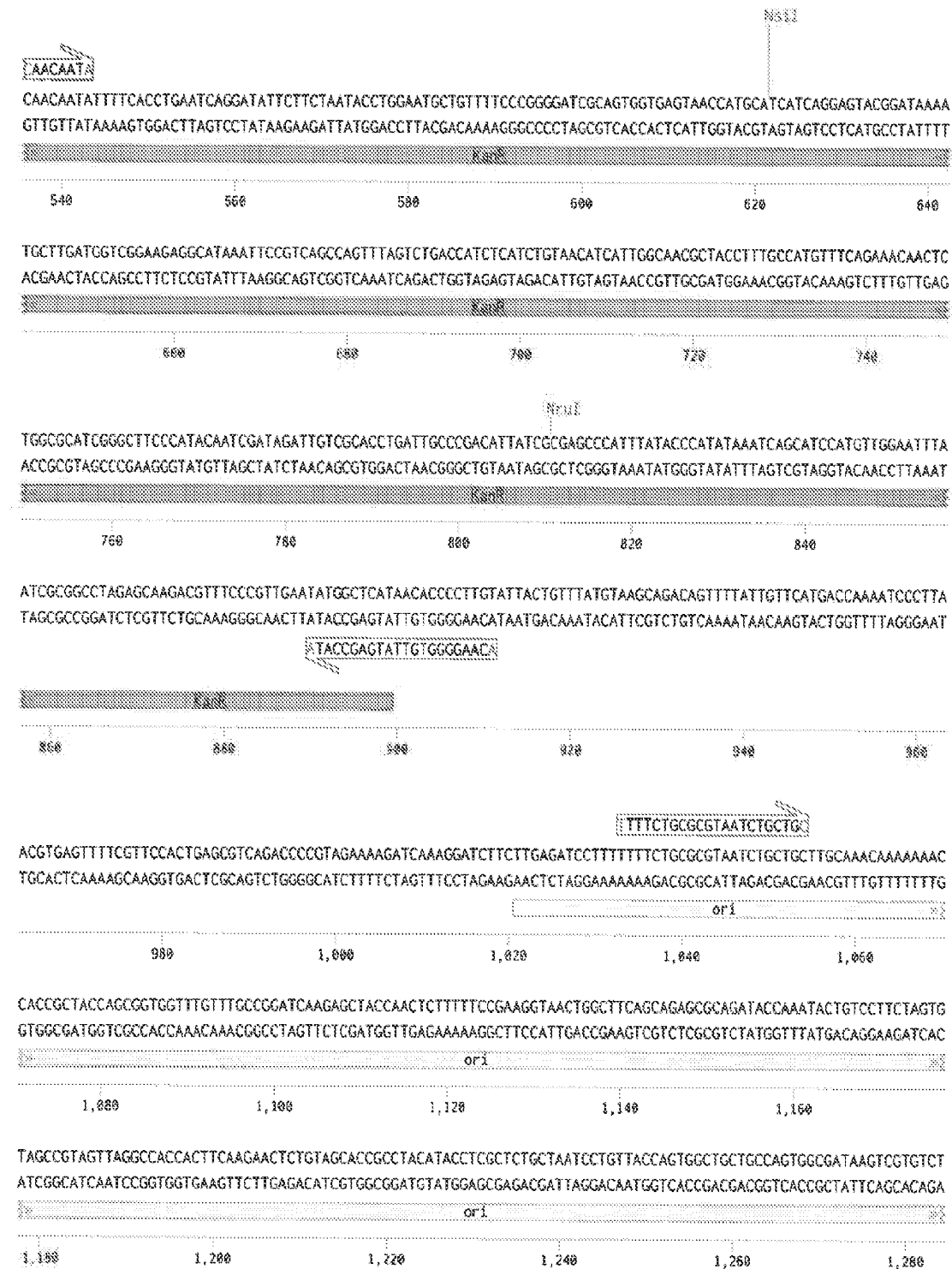


Figure 12C

pAAV.GNEpro.GNE.miniIRES-FST344 KanR (8340 bp) (from 1285-1926 bp)

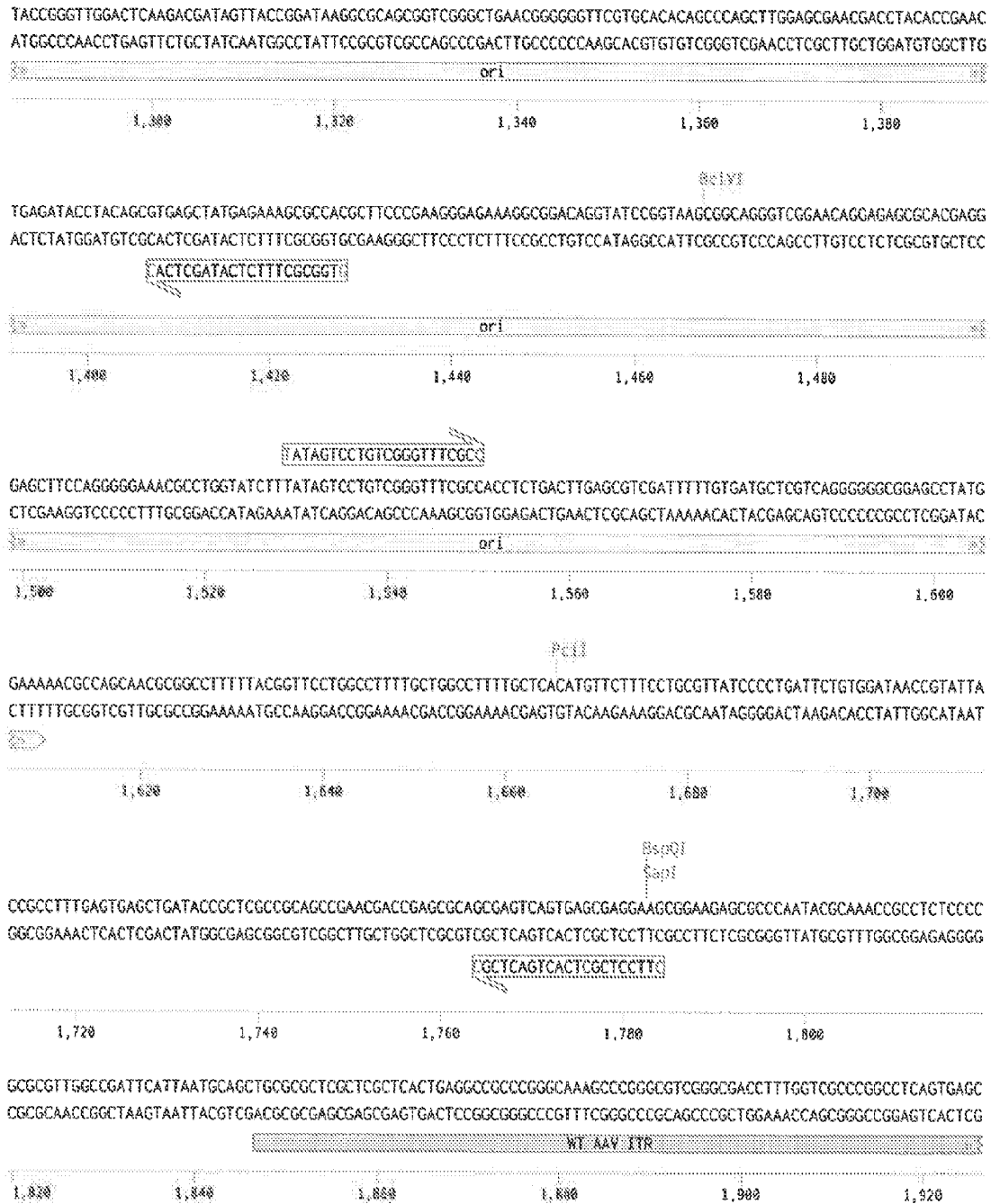
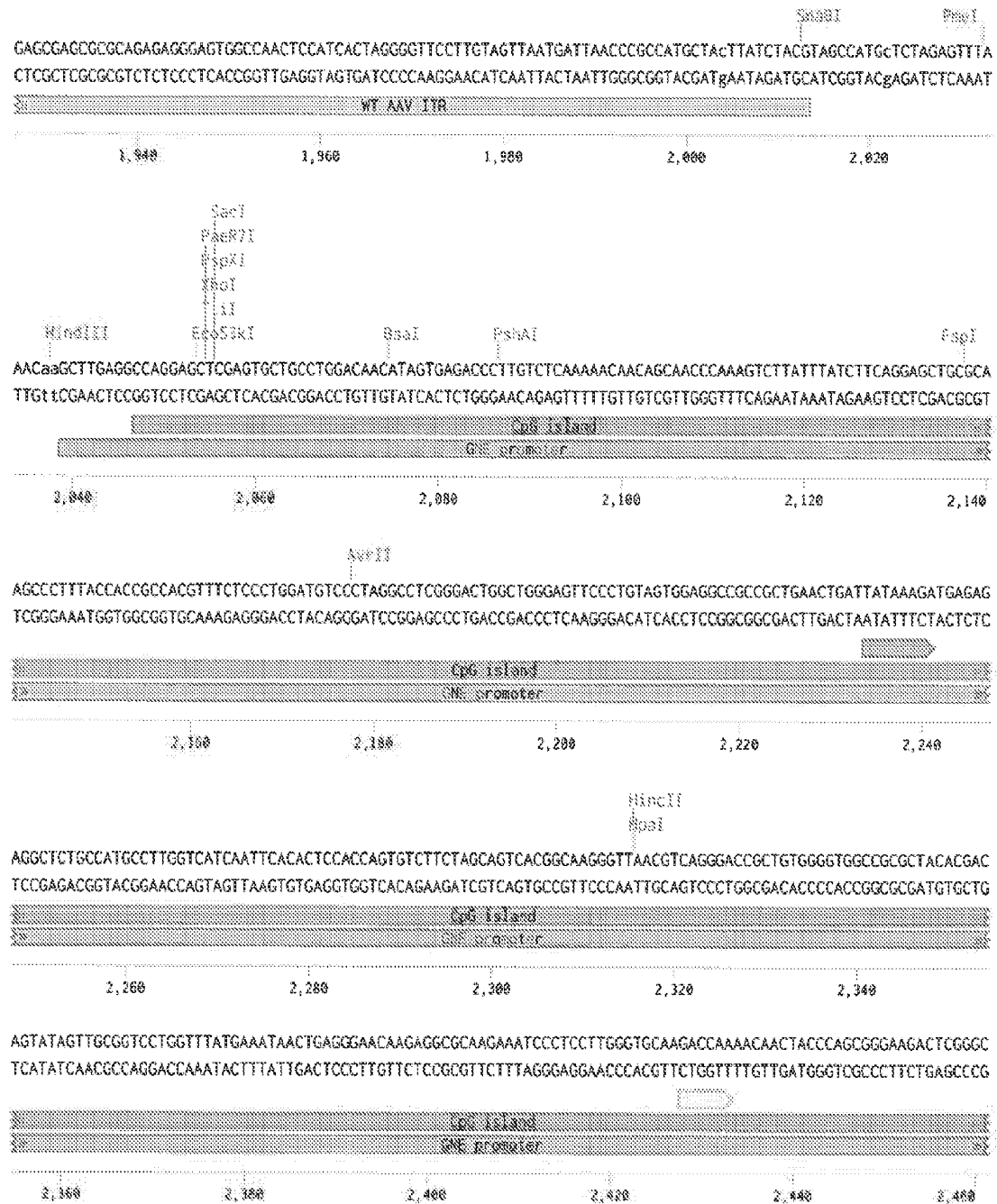
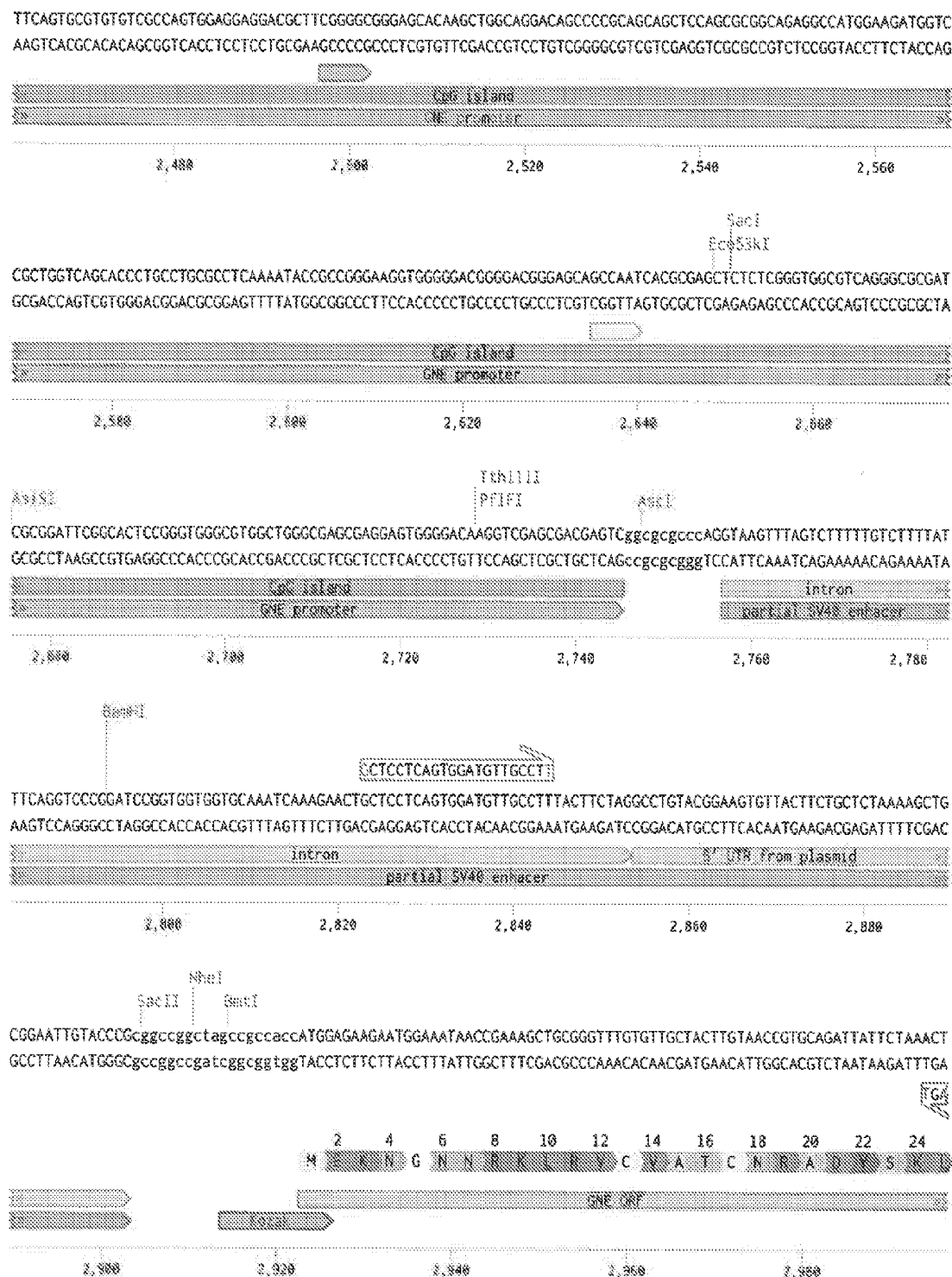


Figure 12D

pAAV.GNEpro.GNE.miniRES-FST344 KanR (8340 bp) (from 1927-2461 bp)

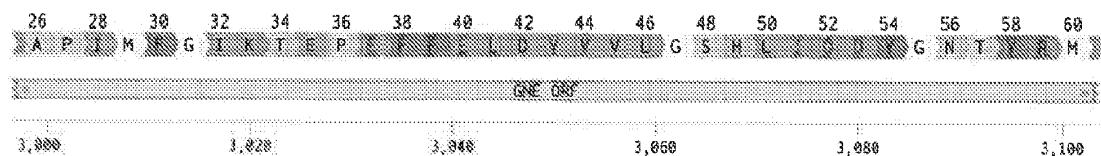
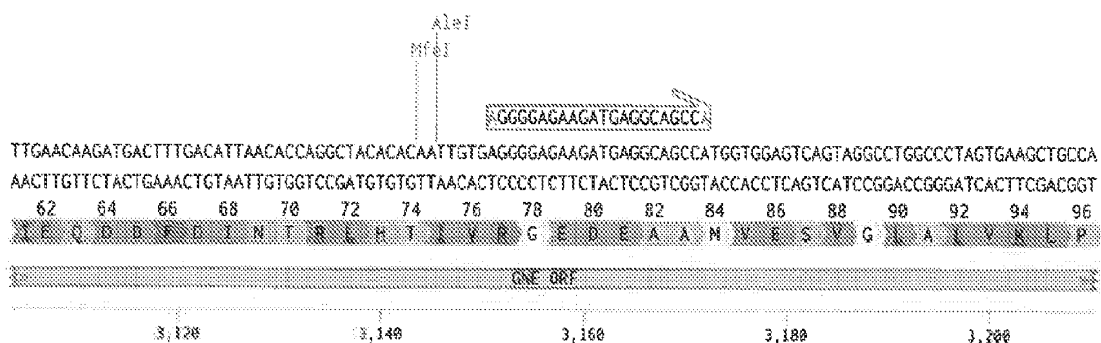
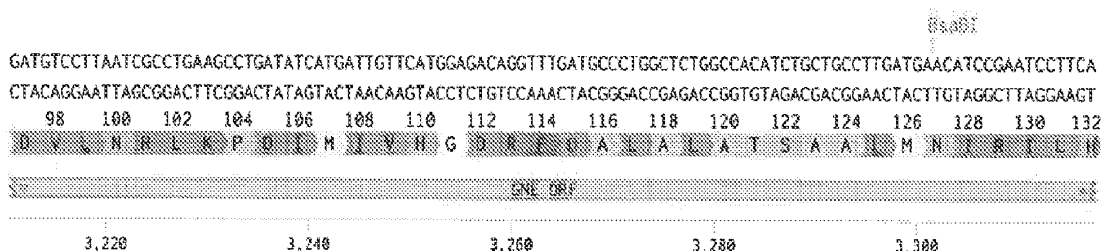
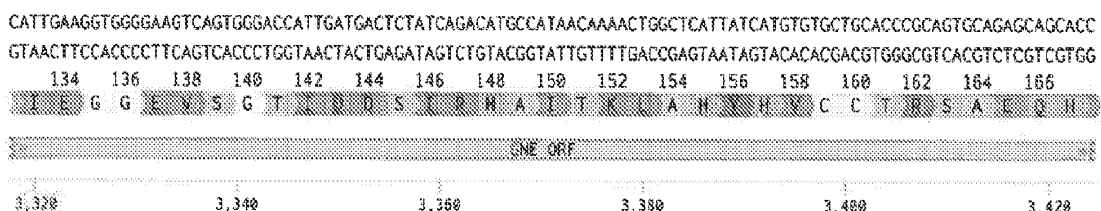
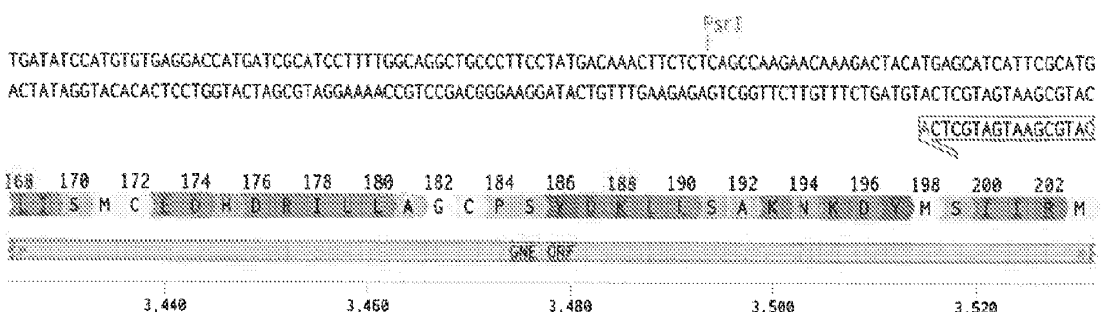


pAAV.GNEpro.GNE.miniIRE5-FST344 KanR (8340 bp) (from 2462-2996 bp)



pAAV.GNEpro.GNE.miniIRES-FST344 KanR (8340 bp) (from 2997-3531 bp)

TGCCCCGATCATGTTTGGCATTAAACCGAACCTGAGTTCTTTGAACCTGATGTTGTGGTACTTGGCTCTCACCTGATAGATGACTATGGAAATACATATCGAATGA
ACGGGGCTAGTACAAACCGTAATTTTGGCTTGGACTCAAGAACTTGAACACCAACCATGAACCGAGAGTGGACTATCTACTGATACCTTTATGTATAGCTTACT
CGGGGCTAGTACAAACCG



pAAV.GNEpro.GNE.miniRES-FST344 KanR (8340 bp) (from 3532-4066 bp)

TGGCTAGGTGATGATGTAATCTAAAGATTACATTGTTGCACTACAGCACCCTGTGACCACTGACATTAAGCATTCCATAAAATGTTTGAATTAACATTGGATGC
ACCGATCCACTACTACATTTTAGATTCTAATGTAACAACGTGATGTCGTGGGACACTGGTGACTGTAATTCGTAAGGTATTTTACAAACTTAATTGTAACCTACG
CCGA

204 206 208 210 212 214 216 218 220 222 224 226 228 230 232 234 236 238
M I G D D V S E D F I V A L Q H P V T T R S S H S T P M S E L T L R A
GNE ORF
3,540 3,560 3,580 3,600 3,620

PshAI
CTCATTTAACAAGCGGACCT
ACTTATCTCATTTAACAAGCGGACCTAGTCCTGTTCCAAATATTGACGCAGGAGCAAAGAGATGGTTCGAGTGATGCGGAAGAAGGGCATTGAGCATCATCCCA
TGAATACAGTAAATTTGCGCTGGGATCAGGACAAAGGTTTATAACTGCGTCCCTGTTTCTTACCAAGCTCACTACGCCTTCTCCGTAACCTCGTAGTAGGT
240 242 244 246 248 250 252 254 256 258 260 262 264 266 268 270 272 274
S I S N E E T L V L P N I D A G S K E M Y R Y M R K K G L E H N P
GNE ORF
3,640 3,660 3,680 3,700 3,720 3,740

ACTTCGTGCACTTAAACACGTCCCATTTGACCACTTTATACAGTTGGTTCGCCATGCTGGCTGTATGATTGGGAACAGCAGCTGTGGGTTTCGAGAAGTTGGAGCT
TGAAAGCAGCTCAATTTGTGCGGGTAAACTGGTCAAATATGTCAACCAACGGGTACGACCGACATACTAACCTTGTCTCGACACCCCAAGCTCTTCAACCTCGA
276 278 280 282 284 286 288 290 292 294 296 298 300 302 304 306 308 310
N E R A Y K H V P D Q I Q L V A H A G C M Y G N S S C G V R E V G A
GNE ORF
3,760 3,780 3,800 3,820 3,840

BclI
TTTGGAAACCTGTGATCAACCTGGGAACACGTGAGATTGGAAGAGAAACAGGGGAGAATGTTCTTCATGTCGGGATGCTGACACCCCAAGACAAAATATTGCAAGC
AAACCTTGTGGACACTAGTTGGACCTTGTGCACTCTAACCCTTCTCTTTGTCCCTCTTACAAGAAGTACAGGCCCTACGACTGTGGGTTCTGTTTATAACGTTG
312 314 316 318 320 322 324 326 328 330 332 334 336 338 340 342 344 346
G T P V I N I G T R Q T G R T G E N V L H V R D A D T Q Q K I L Q A
GNE ORF
3,860 3,880 3,900 3,920 3,940

BstAPI
ACTGCACCTTCAGTTTGGTAAACAGTACCCTTGTTCAAAGATATATGGGGATGGAAATGCTGTTCCAAGGATTTTGAAGTTTCTCAAATCTATCGATCTTCAAGAGC
TGACGTGGAAGTCAAACCTTTGTCATGGGAACAAGTTTCTATATACCCCTACCTTTACGACAAGGTTCTTAAACTTCAAAGAGTTTAGATAGCTAGAAGTCTCG
CCCTACCTTTACGACAAGG
348 350 352 354 356 358 360 362 364 366 368 370 372 374 376 378 380
L H L Q P G K Q P C S R T G D G N A V P P I L R I L K S I D L Q E
GNE ORF
3,960 3,980 4,000 4,020 4,040 4,060

Figure 12H

pAAV.GNEpro.GNE.miniIRES-FST344 KanR (8340 bp) (from 4067-4601 bp)

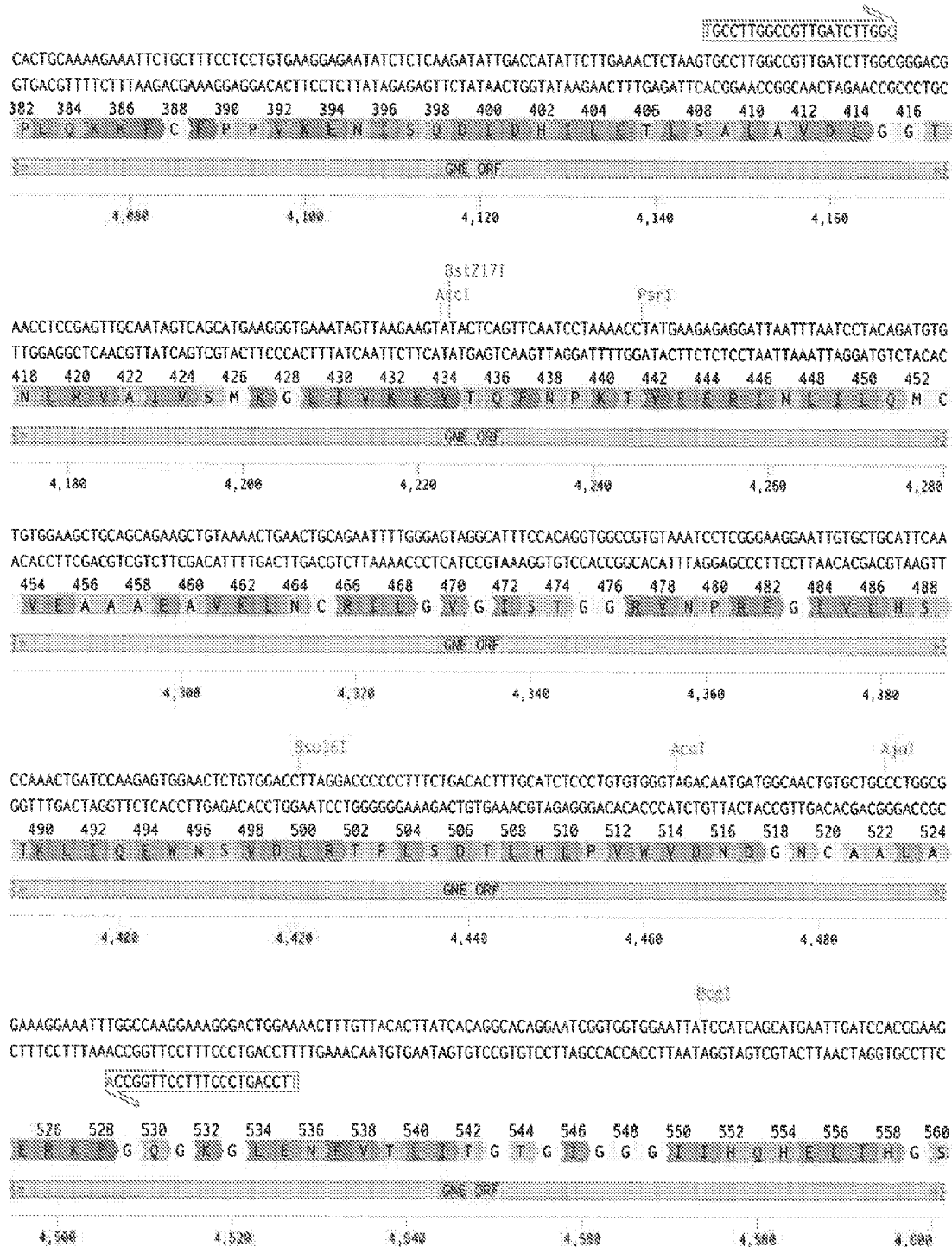


Figure 12|

pAAV.GNEpro.GNE.miniRES-FST344 KanR (8340 bp) (from 4602-5029 bp)

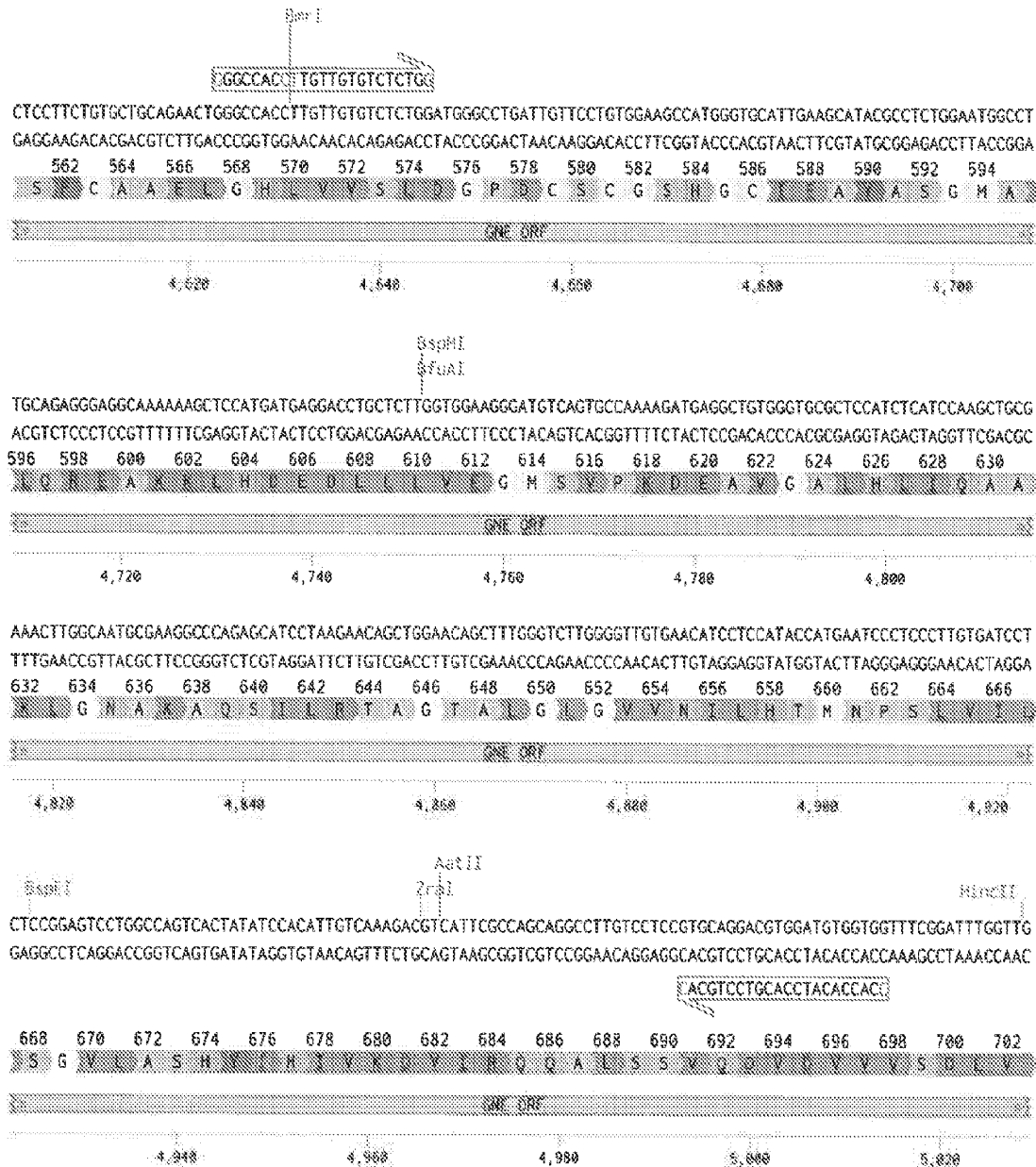


Figure 12J

pAAV.GNEpro.GNE.minIRES-FST344 KanR (8340 bp) (from 5030-5564 bp)

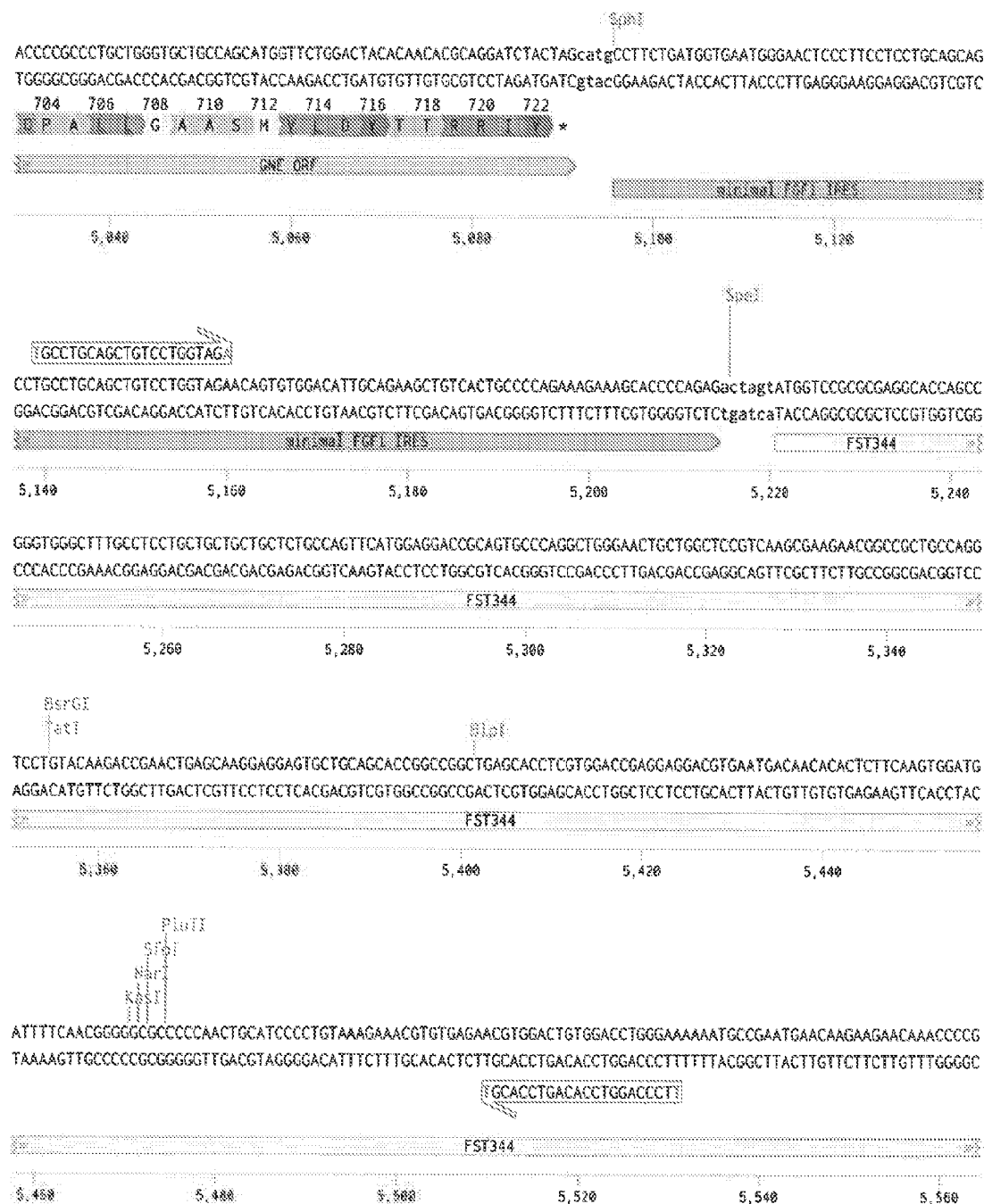


Figure 12K

pAAV.GNEpro.GNE.miniRES-FST344 KanR (8340 bp) (from 5565-6206 bp)

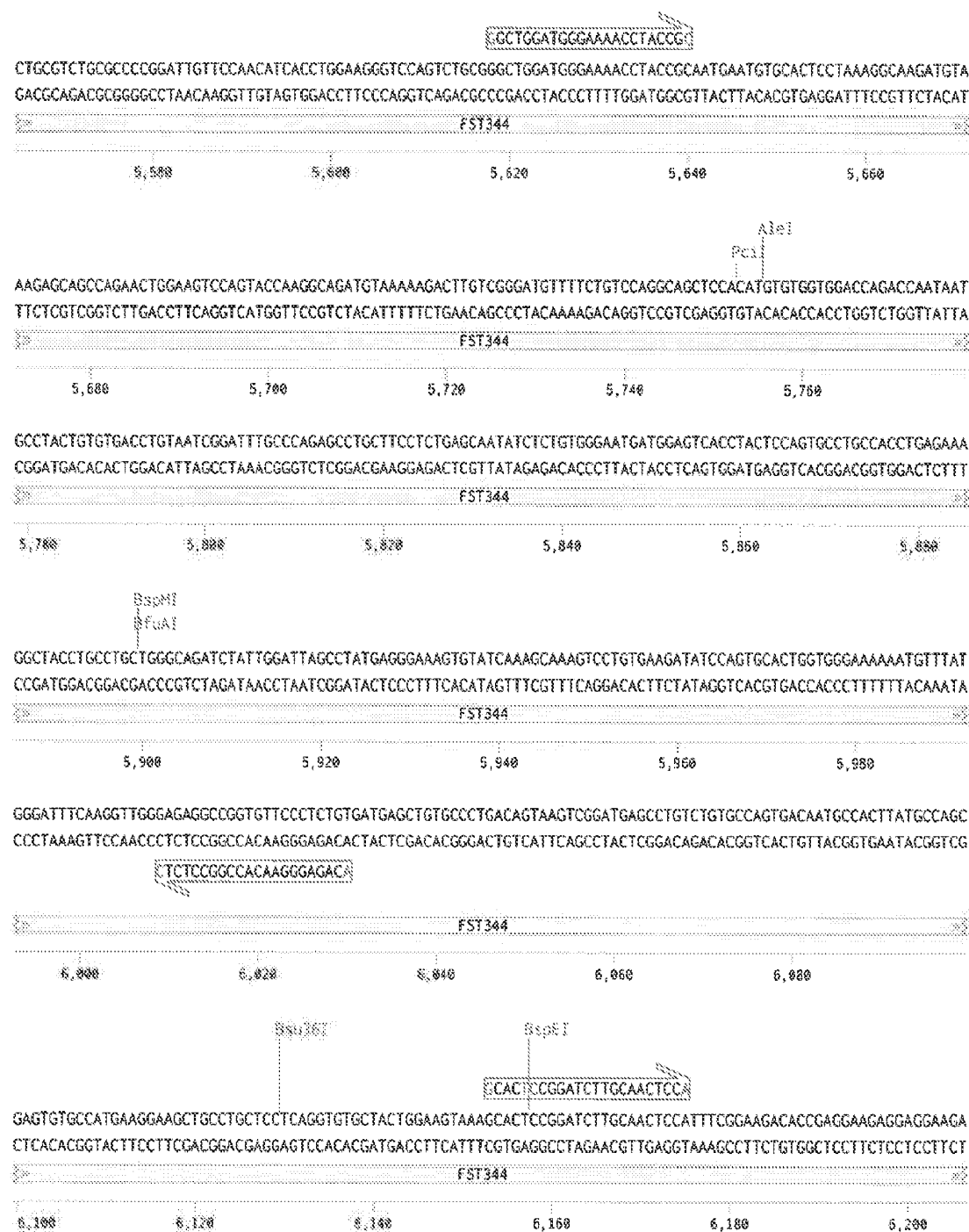


Figure 12L

pAAV.GNEpro.GNE.miniIRE5-FST344 KanR (8340 bp) (from 6207-6955 bp)

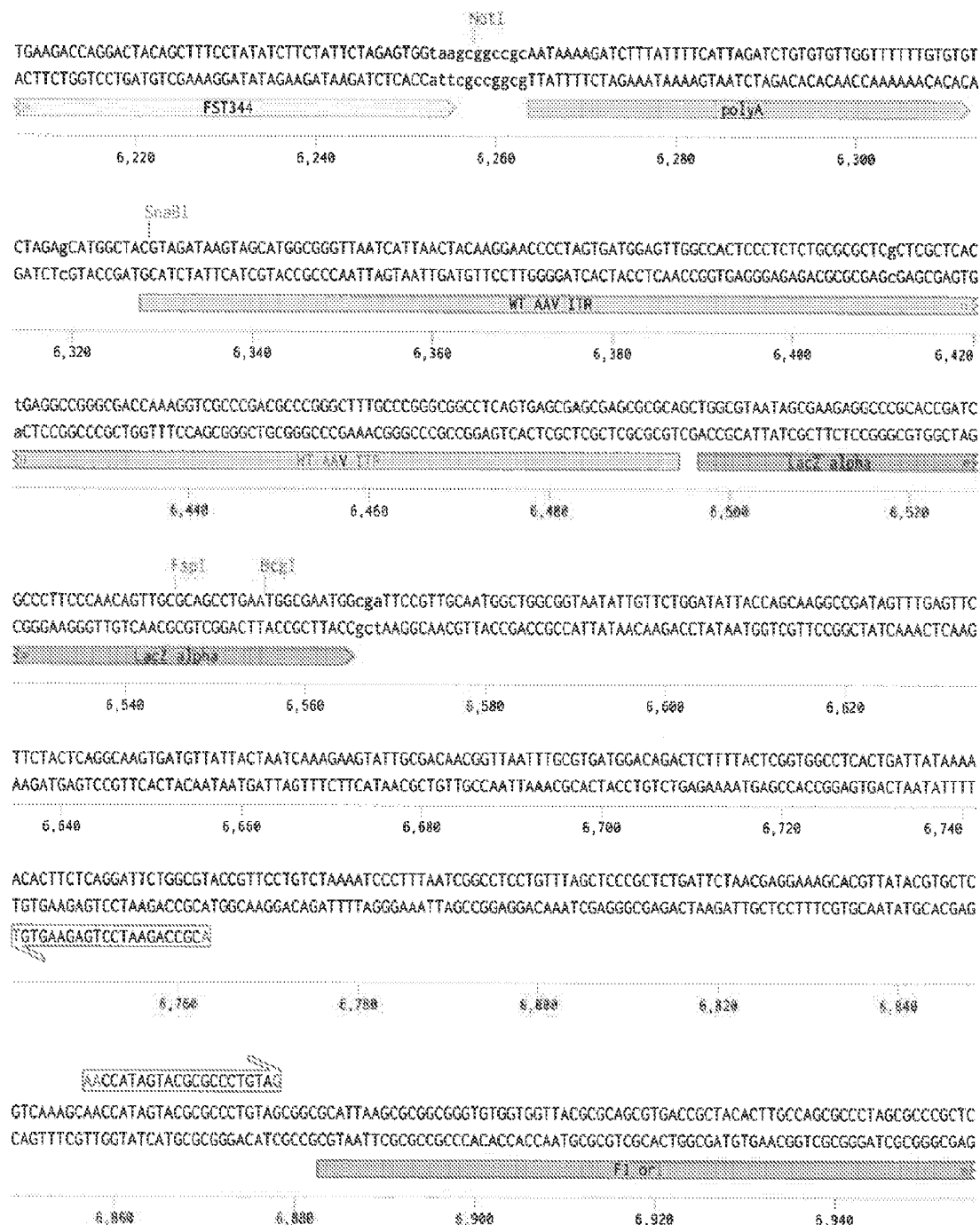


Figure 12M

pAAV.GNEpro.GNE.miniRES-FST344 KanR (8340 bp) (from 6956-7811 bp)

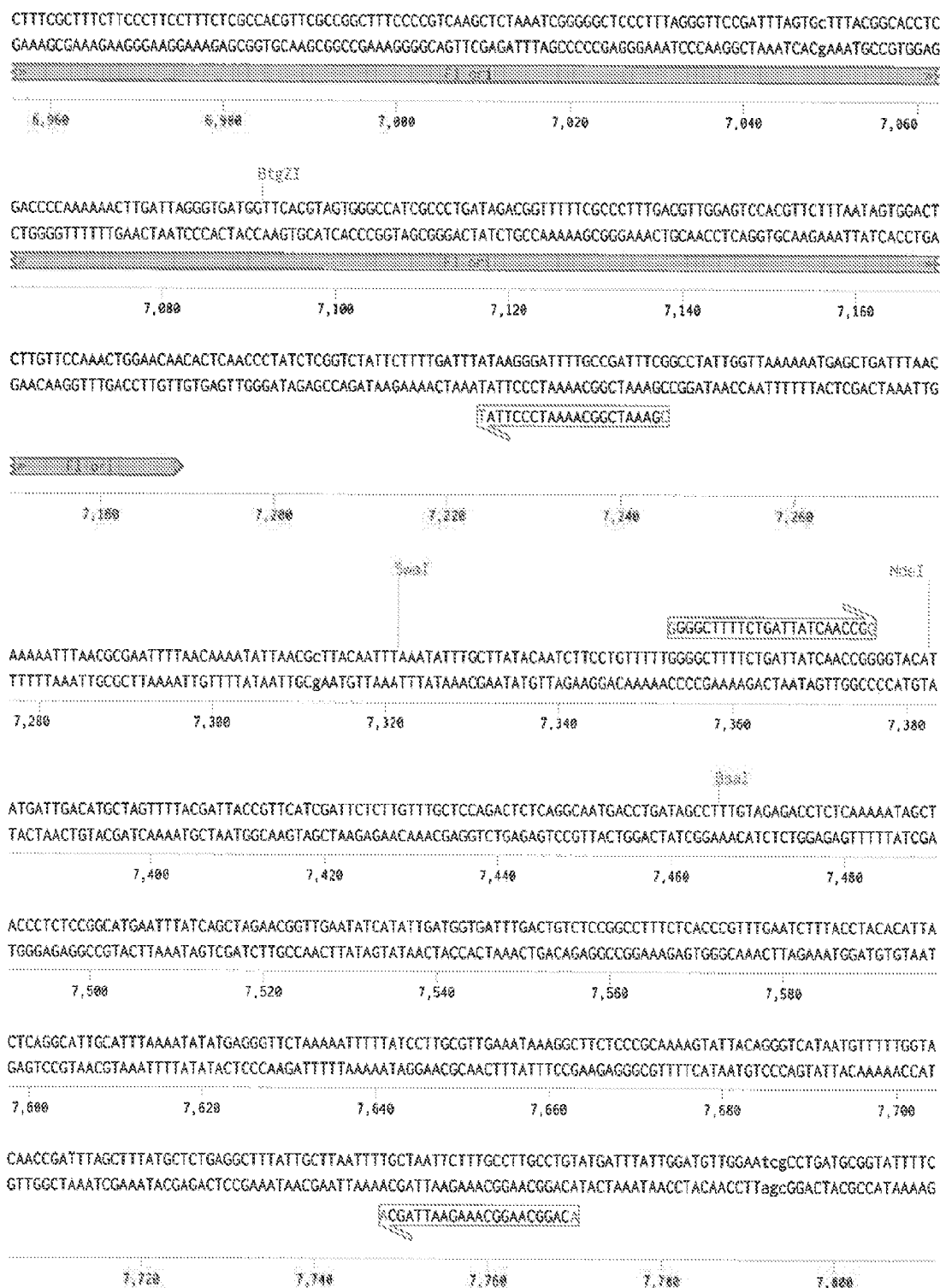


Figure 12N

pAAV.GNEpro.GNE.miniRES-F51344 KanR (8340 bp) (from 7812-8340 bp)

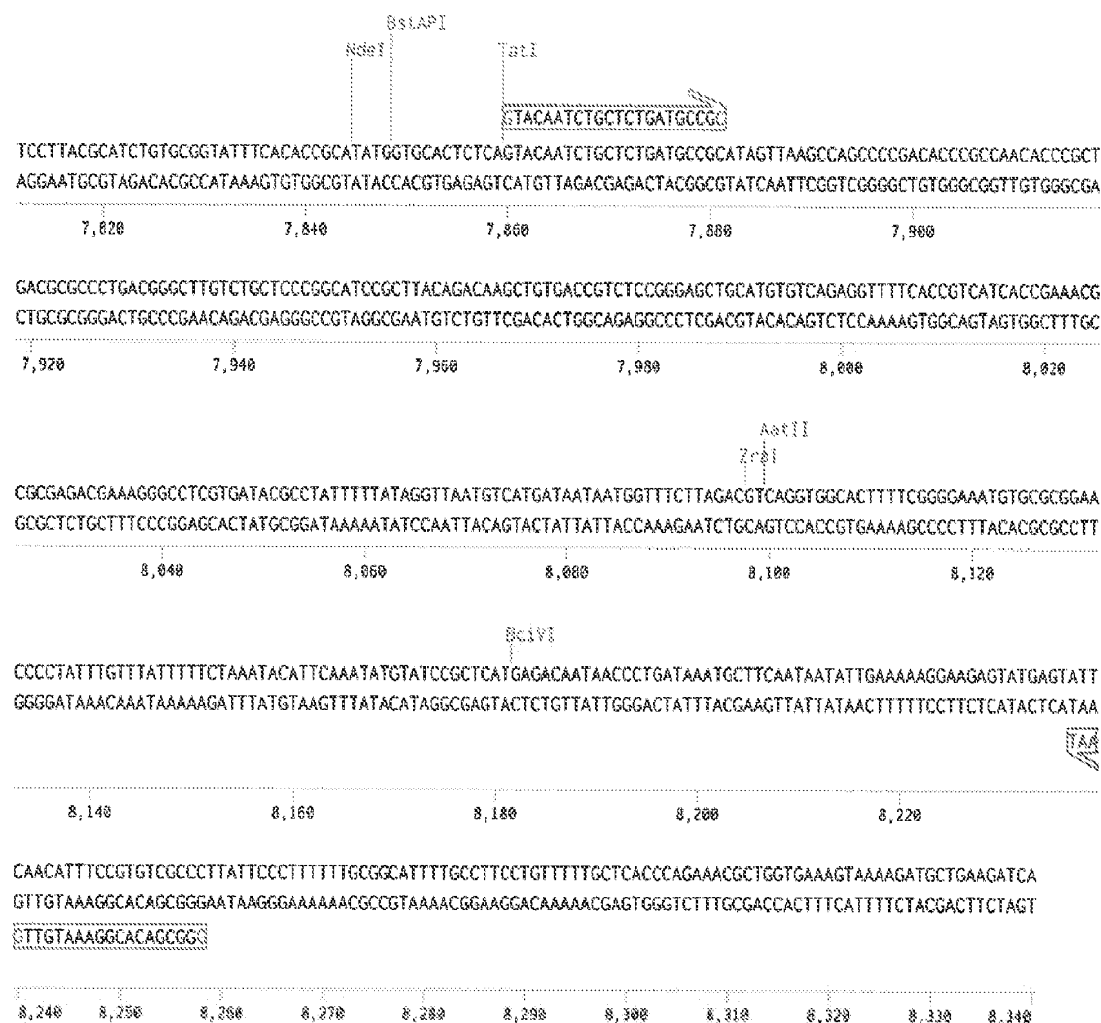


Figure 13A

(from 1-535 bp)

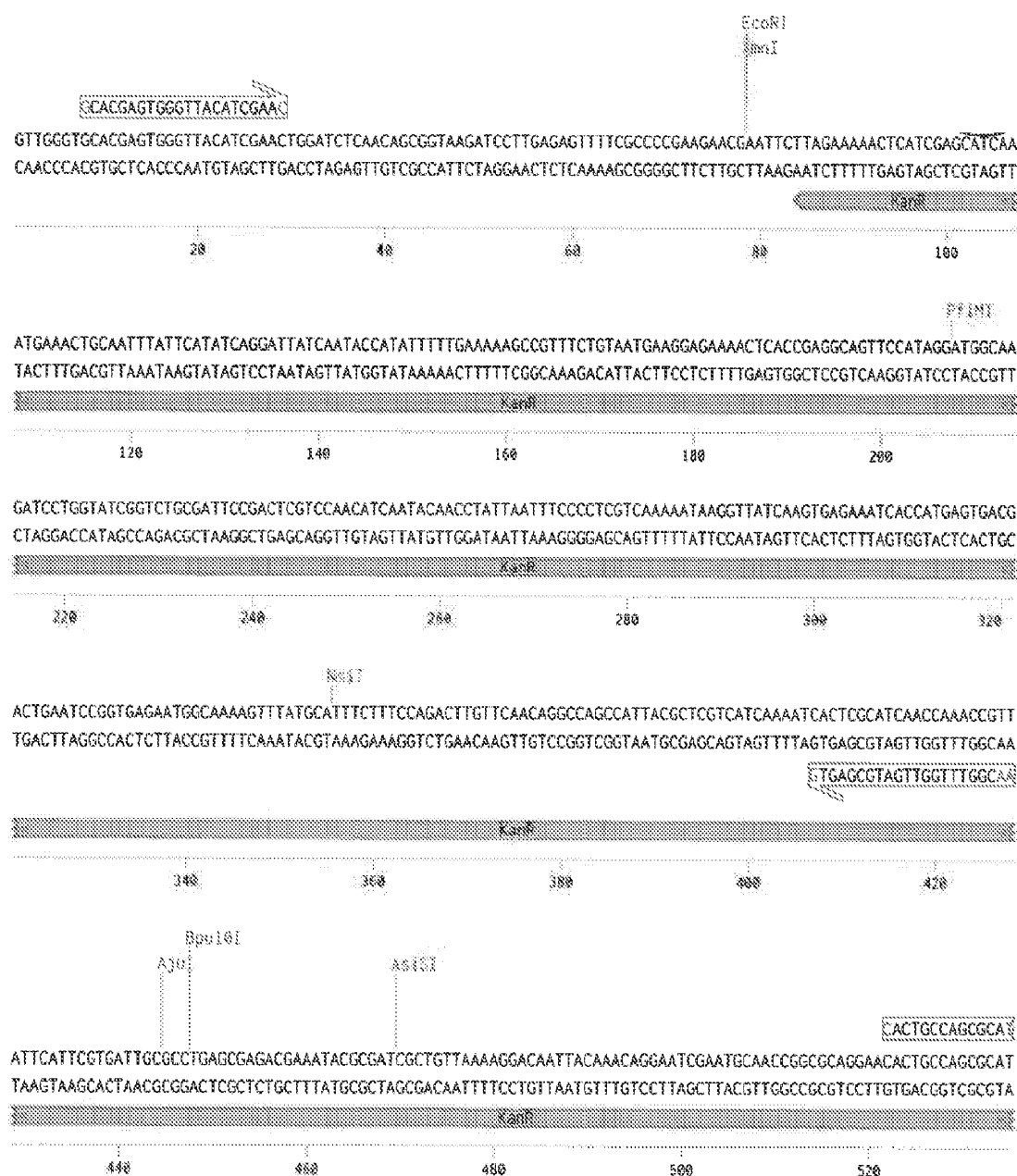
pAAV.GNEpro.GNE.miniIRES.sHB-IGF1 KanR (7843 bp)

Figure 13B

pAAV.GNEpro.GNE.miniIRE5.sh8-IGF1 KanR (7843 bp) (from 536-1284 bp)

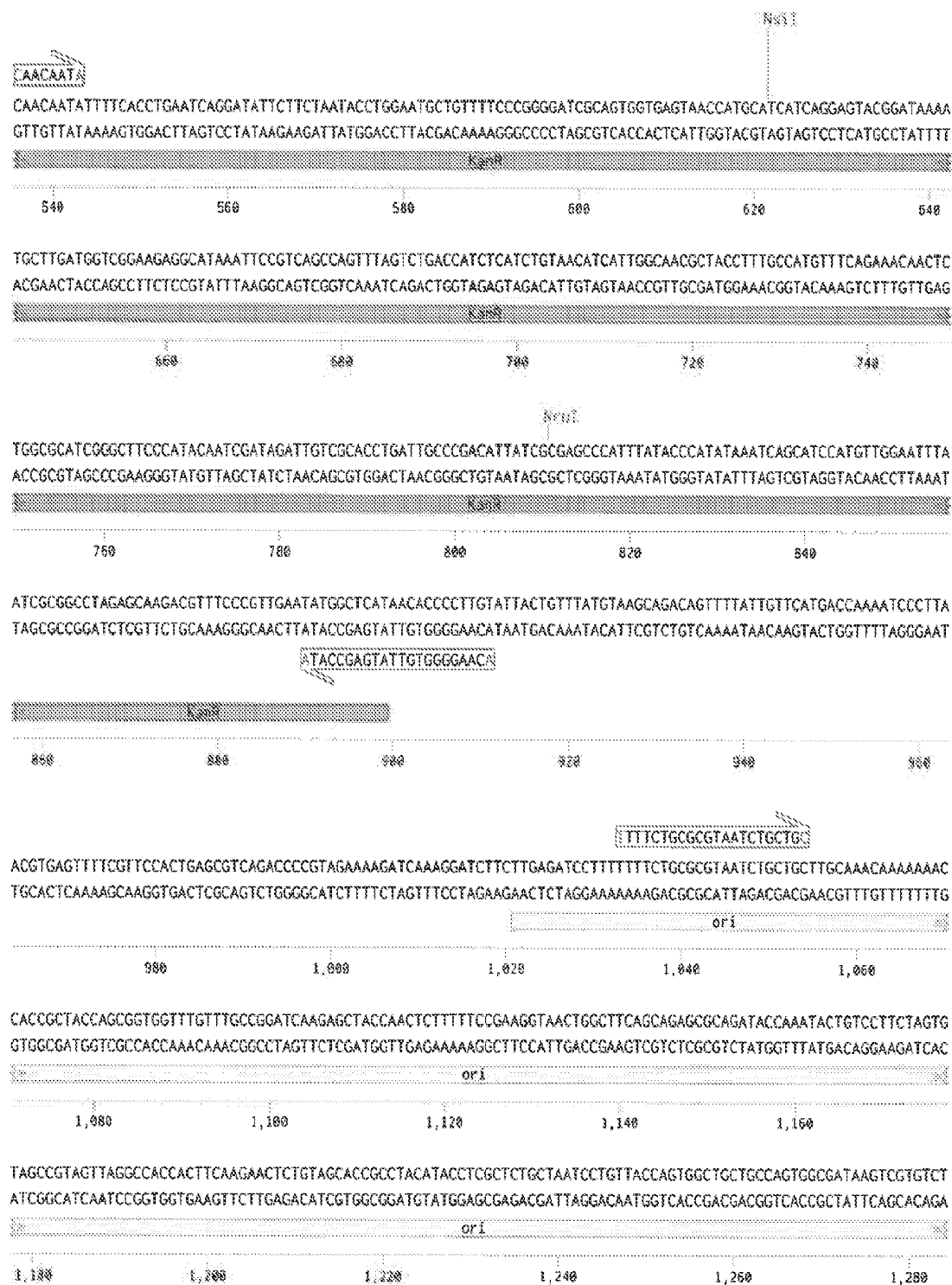
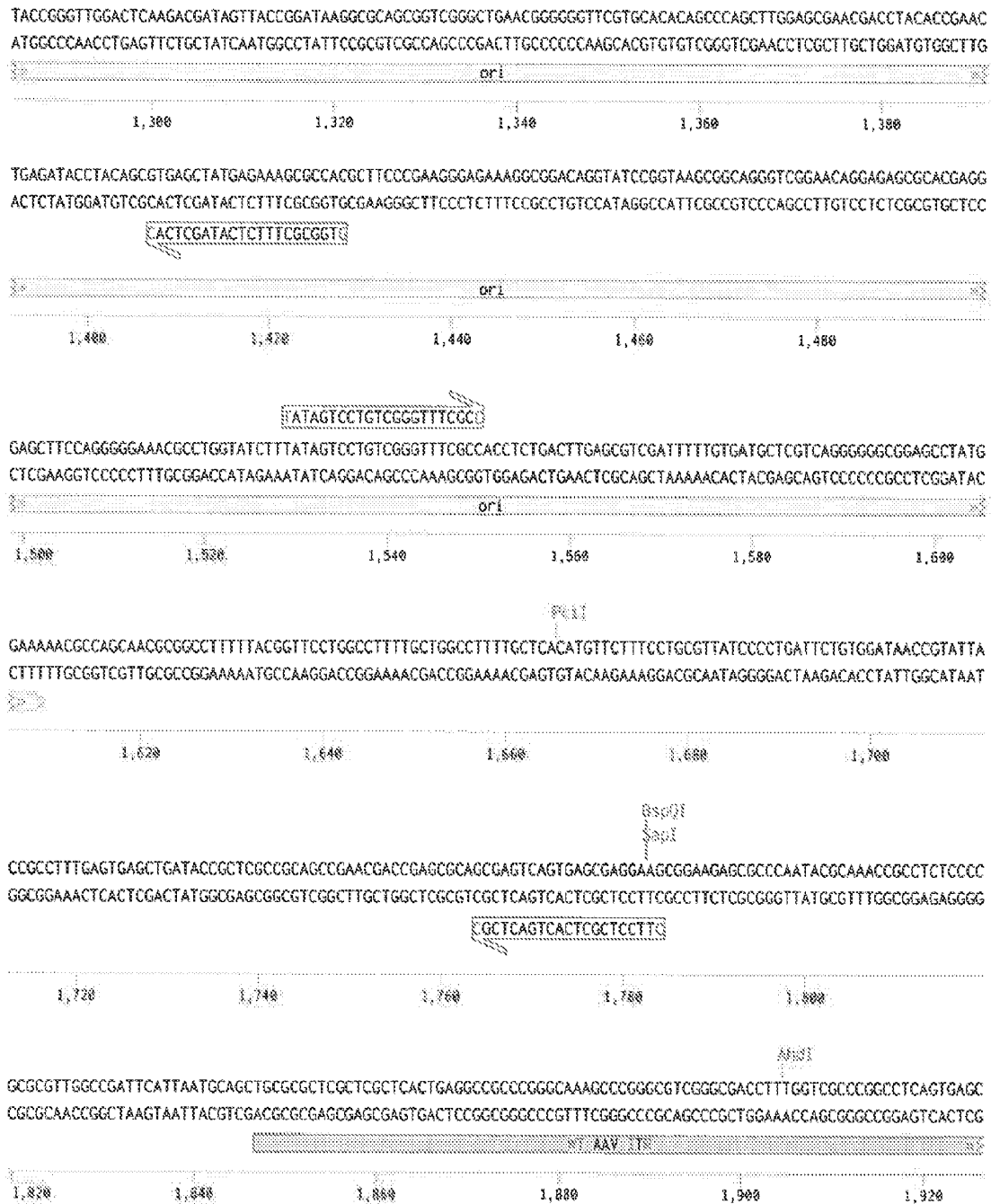


Figure 13C

pAAV.GNEpro.GNE.miniRES.sHB-IGF1 KanR (7843 bp) (from 1285-1926 bp)



pAAV.GNEpro.GNE.minIRES.sHB-IGF1 KanR (7843 bp) (from 1927-2461 bp)

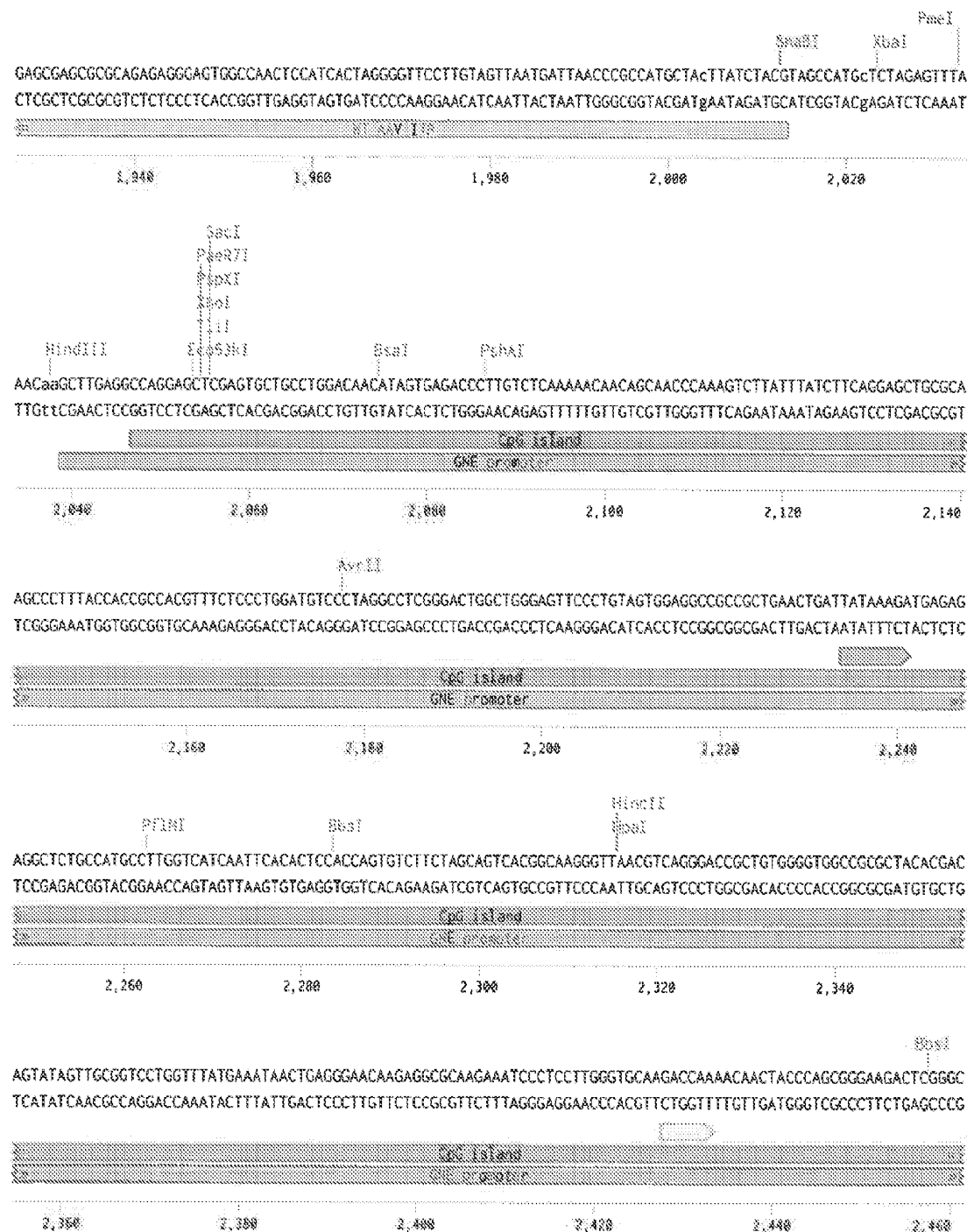


Figure 13E

pAAV.GNEpro.GNE.miniRES.sHB-IGF1 KanR (7843 bp) (from 2462-2996 bp)

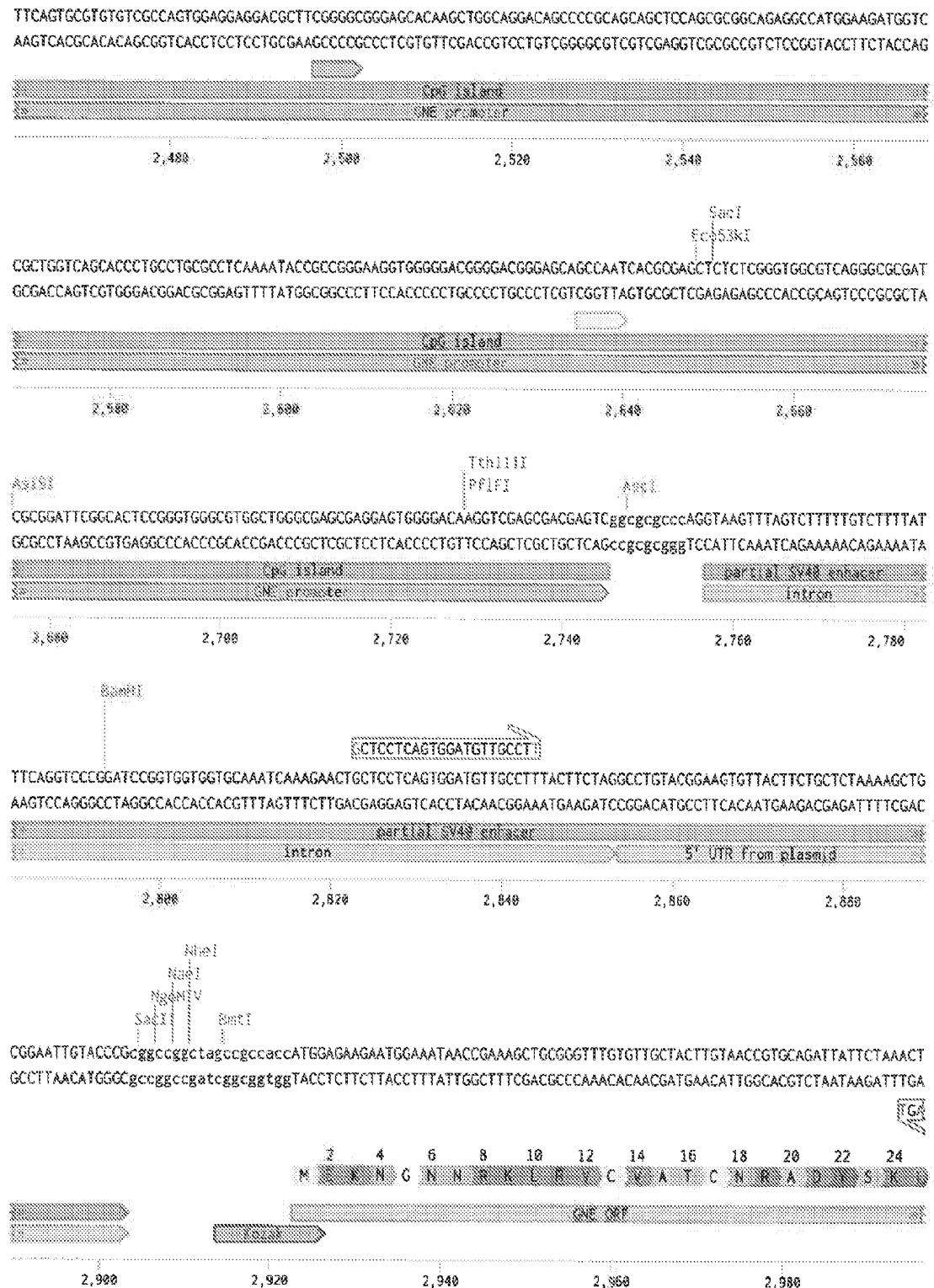


Figure 13F

pAAV.GNEpro.GNE.miniIRES.sHB-IGF1 KanR (7843 bp) (from 2997-3424 bp)

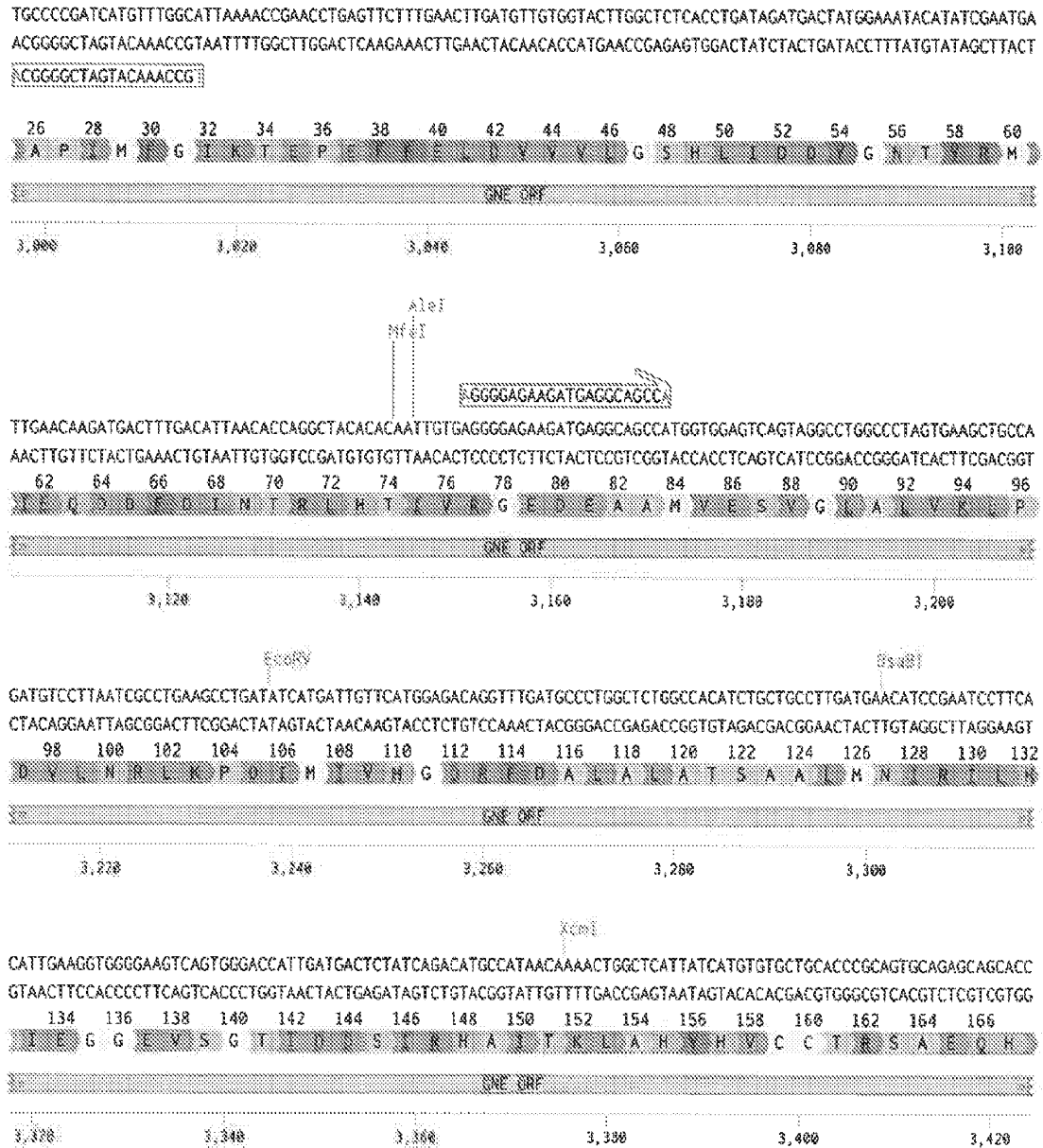


Figure 13G

pAAV.GNEpro.GNE.miniRES.sHB-IGF1 KanR (7843 bp) (from 3425-3959 bp)

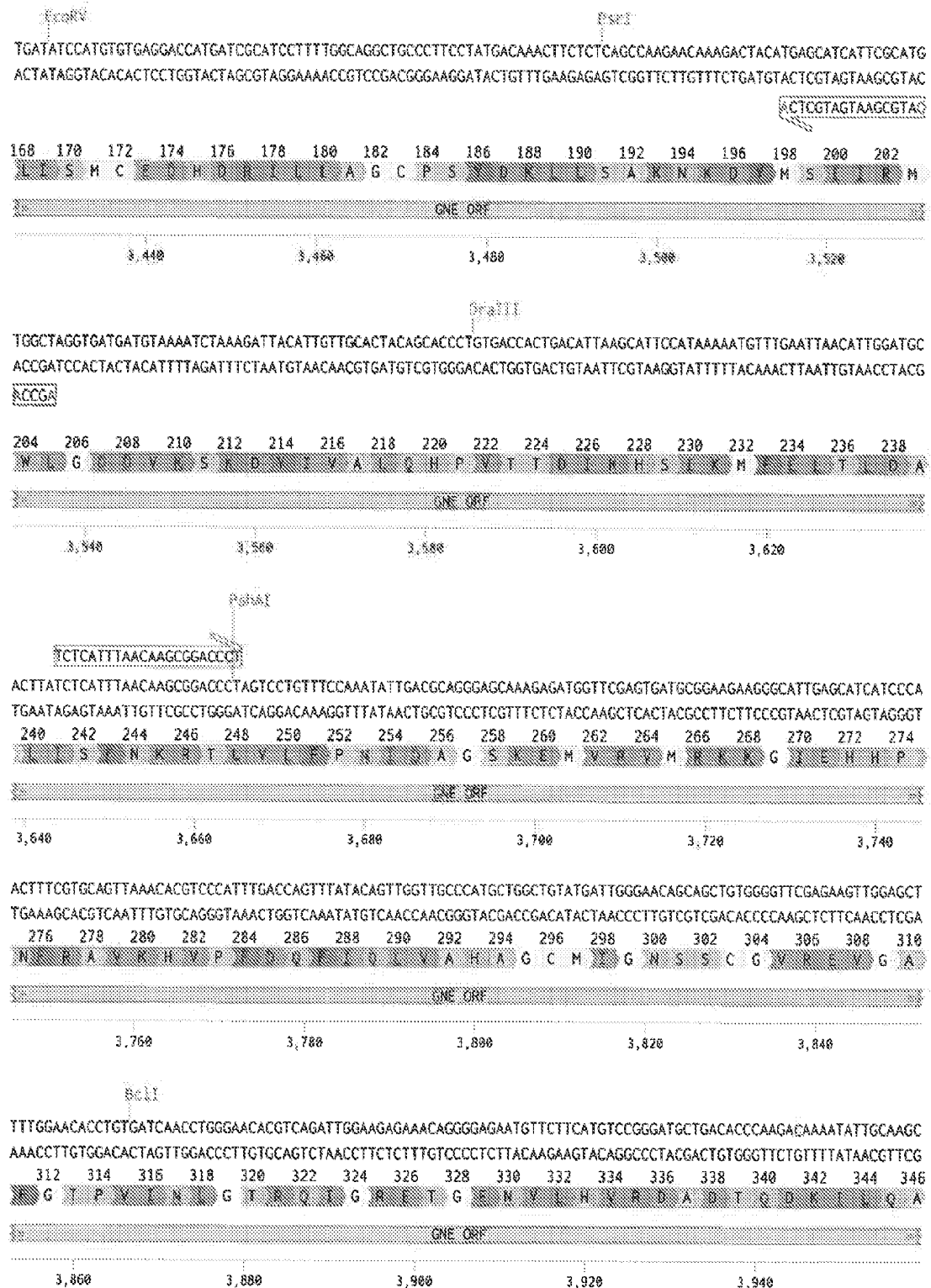


Figure 13H

pAAV.GNEpro.GNE.miniRES.shB-IGF1 KanR (7843 bp) (from 3960-4494 bp)

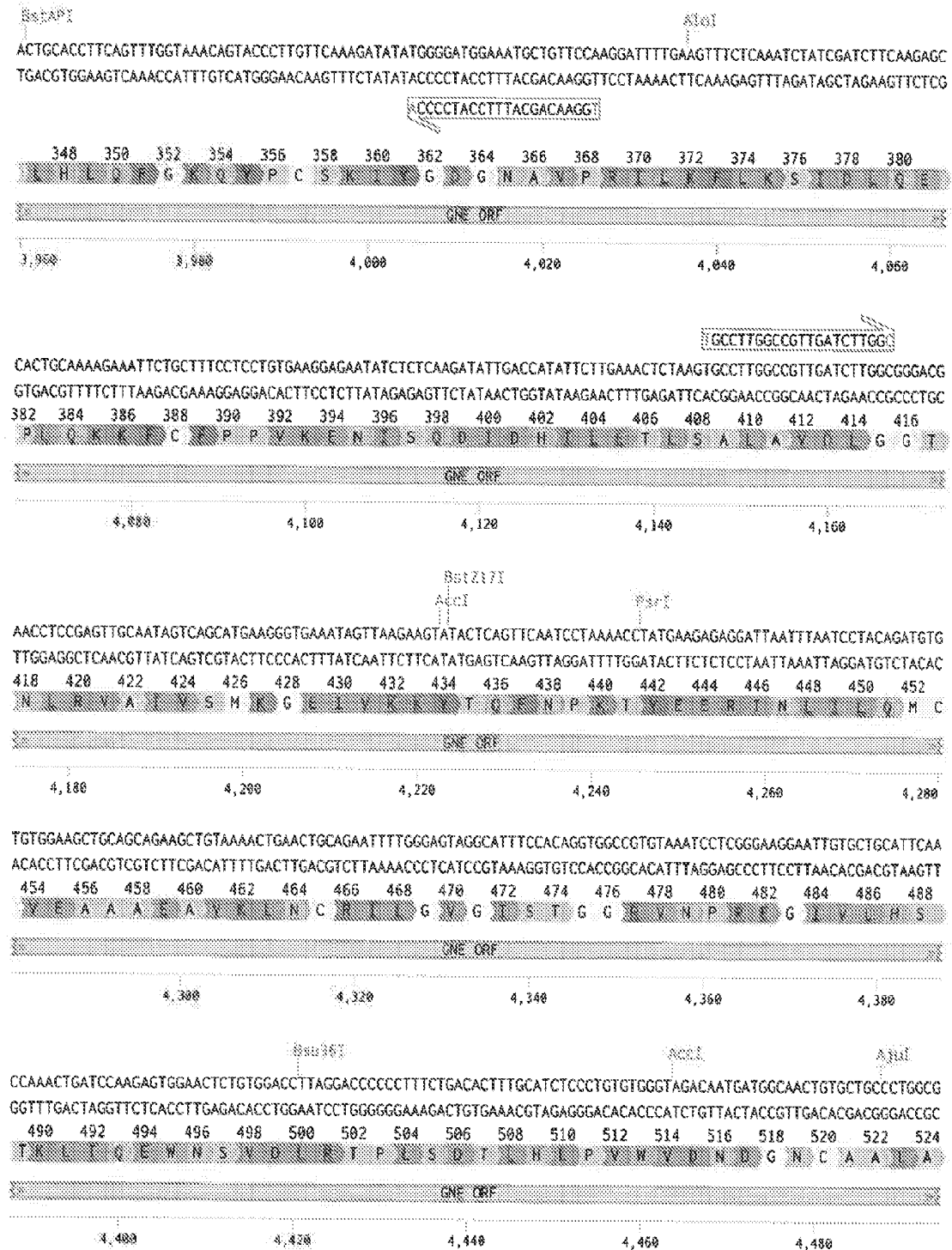
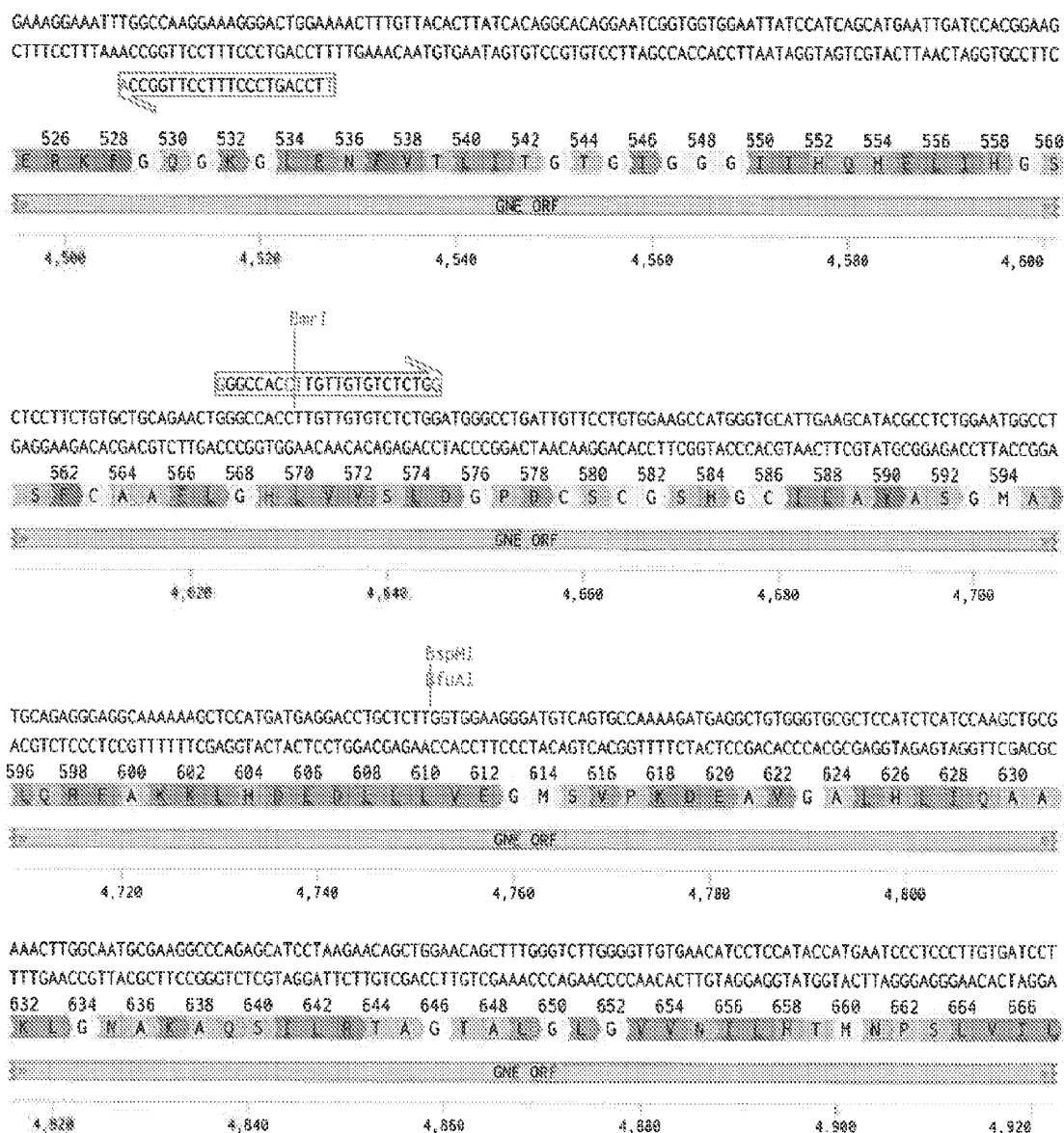


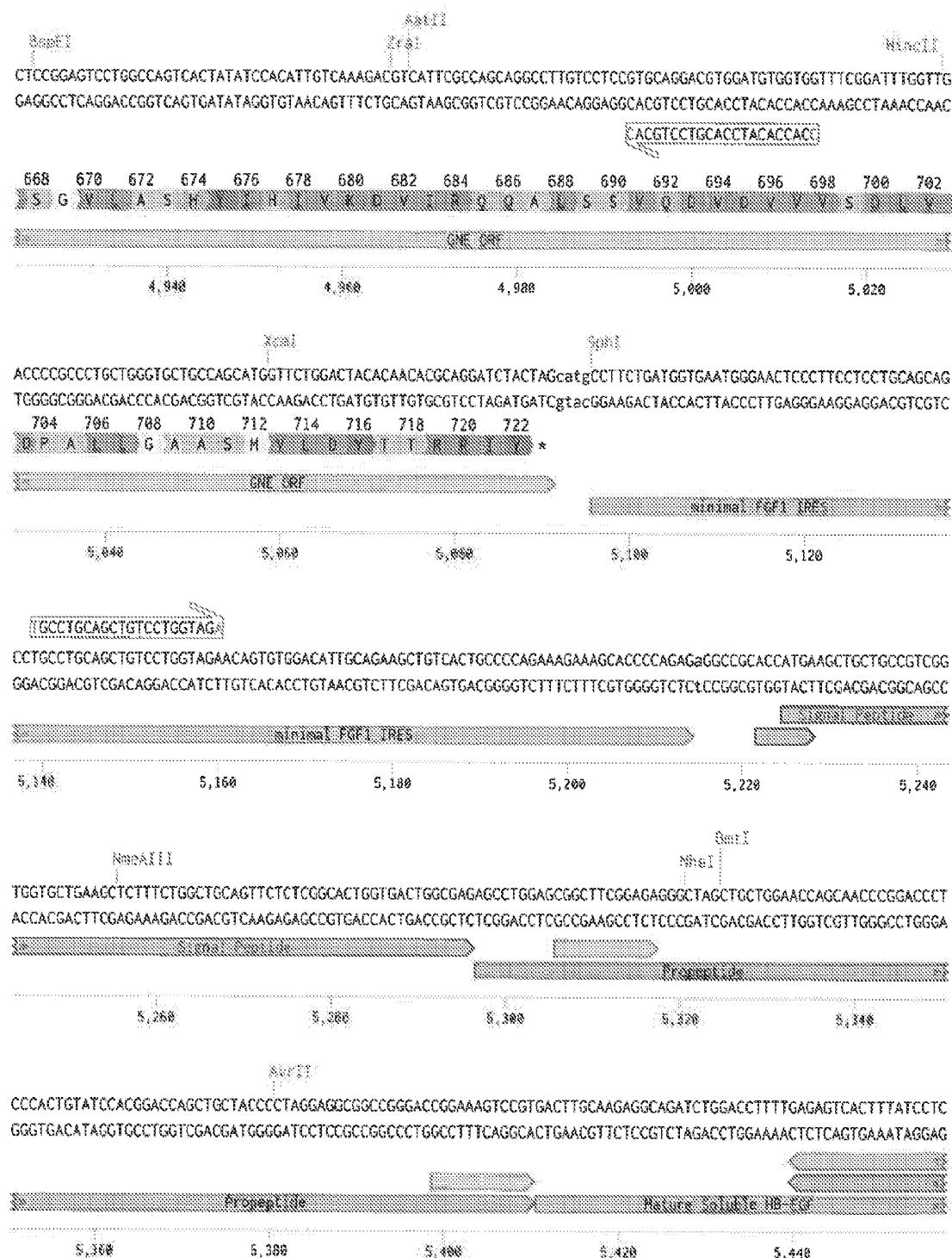
Figure 131

pAAV.GNEpro.GNE.miniIRES.sHB-IGF1 KanR (7843 bp) (from 4495-4922 bp)



pAAV.GNEpro.GNE.miniRES.SHB-HB-1 KanR (7843 bp) (from 4923-5457 bp)

Figure 13J



CAAGCCACAAGCACTGGCCACCAACAAGGAGGAGCACCGGAAAGAAAGAAAGCAAGGGGCTAGGGAAGAGAGGGACCCAGGACCCGAGACGCTCTGGC
GTTCCGTGTTTCGTCACCGGTGGTGTGTTCTCTCTCTCGTCCCTTTTCTTTCTCTCTTCGGTTCCCGATCCCTTCTCTCTCCCTGGGTCCTGGCCTCTGCGAGACGC

Heparin-Binding Domain

Mature Soluble HB-EGF

Nature IGF1

Exon 3

5,488 5,489 5,500 5,520 5,540 5,560

NotI
SfiI
NheI
KpnI
BspI

BspI

BspOI
SapI

GGGCTGAGCTGGTGGATGCTCTTCAGTTCTGTGTGGAGACAGGGGCTTTATTTCAACAAGCCACAGGGTATGGCTCCAGCAGTCGGAGGGCGCCTCAGACAGGC
CCCGACTCGACCACCTACGAGAAGTCAAGCACACACCTCTGTCCCCGAAATAAGTTGTTCCGGTGTCCCATACCGAGGTCGTGAGCCTCCCGCGGAGTCTGTCCG

Mature IGF1

Exon 3

Exon 4

5,580 5,600 5,620 5,640 5,660

BspEI

BspEI

NotI

SpulOI

ATCGTGGATGAGTCTGCTTCCGGAGCTGTGATCTAAGGAGGCTGGAGATGTATTGGCACCCCTCAAGCCTGCCAAGTCAGCTTAGGCggcgcAATAAAGATCT
TAGCACCTACTCAGCAGGAAGGCTCGACACTAGATTCTCCGACCTCTACATAACCGTGGGGAGTTCGGACGGTTCAGTCGAATCCGcggcgTTATTTTCTAGA

Mature IGF1

Exon 5

polyA

5,680 5,700 5,720 5,740 5,760

XbaI

BspOI

TTATTTTCATTAGATCTGTGTGTGTTTTTTGTGTGTCTAGAGCATGGCTACGTAGATAAGTAGCATGGCGGTTAATCATTAACACAAGGAACCCCTAGTGATG
AATAAAAGTAATCTAGACACACAACCAAAAAACACAGATCTcGTACCGATGCATCTATTATCGTACCCGCCAATTAGTAATTGATGTTCTCTGGGGATCACTAC

polyA

WT AAV ITR

5,780 5,800 5,820 5,840 5,860 5,880

AbaI

GAGTTGGCCACTCCTCTCTCCCGGCTcGCTCGCTCAcAGGCGCGGCGACCAAAAGTCGCCCCAGCGCCGGGCTTTGCCCGGGCGGCCTCAGTGAGCGAGCGAGC
CTCAACCGGTGAGGGAGAGACGCGGAGcGAGCGAGTgaCTCCGGCCCGCTGGTTTCCAGCGGGCTCGCGGCCGCAACGGGCCCGCGGAGTCACTCGCTCGCTCG

WT AAV ITR

5,900 5,920 5,940 5,960 5,980

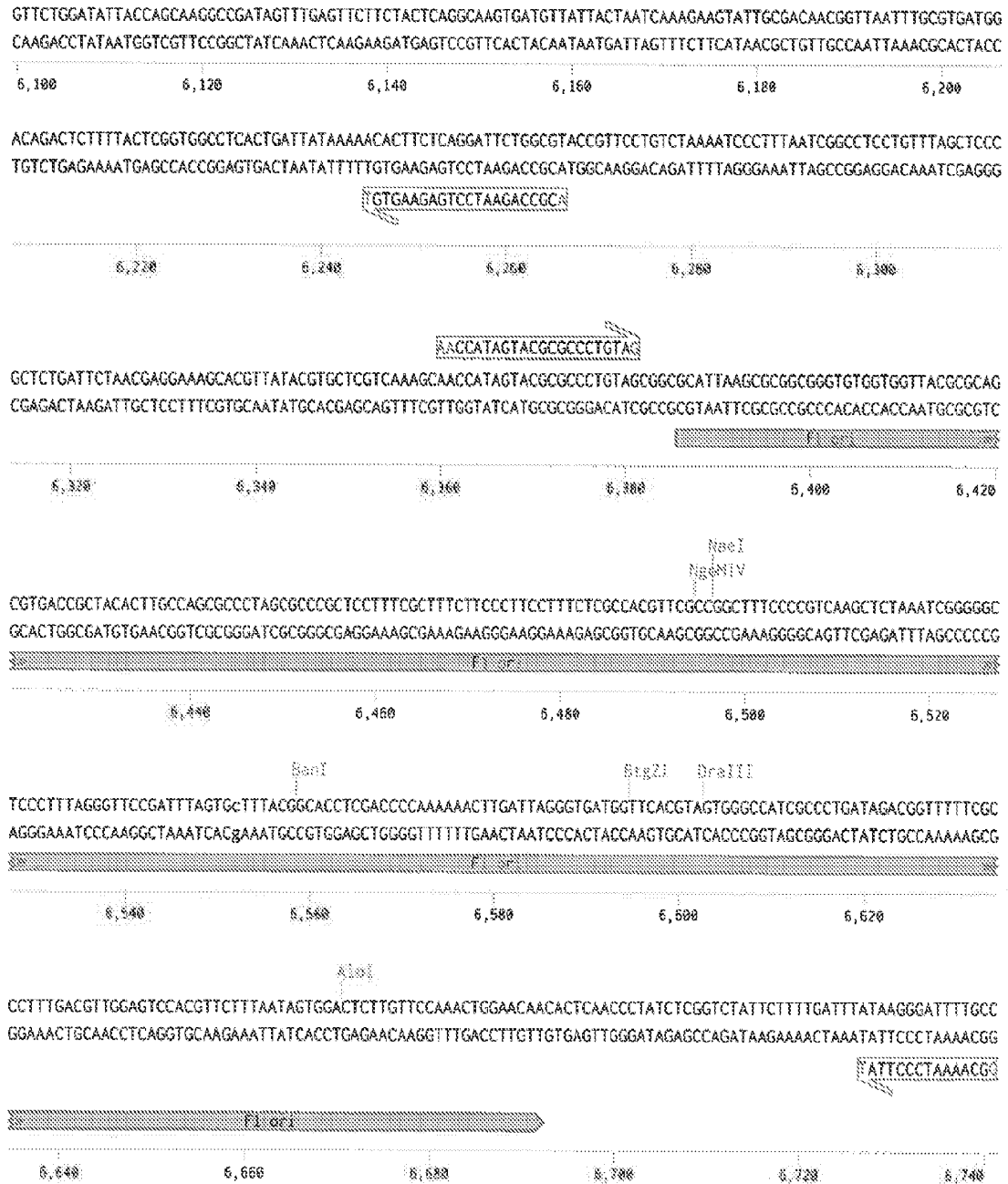
GCGCAGCTGGCGTAATAGCGAAGAGGCCCGCACCGATCGCCCTTCCCAACAGTTGCCAGCCTGAATGGCGAATGGcgATTCGTTGCAATGGCTGGCGGTAATATT
CGCGTCGACCGCATTATCGCTTCTCCGGGCTGGCTAGCGGGAAGGGTTGTCAACCGCTCGGACTTACCGCTTACCGcTAAGGCAACGTTACCGACCGCCATTATAA

La-Z alpha

5,990 5,992 5,994 5,996 5,998

Figure 13L

pAAV.GNE.pro.GNE.miniRBS.SHB-IGF1 KanR (7843 bp) (from 6100-6741 bp)



pAAV.GNEpro.GNE.miniHE5.SHB-IGF1 KanR (7843 bp) (from 6742-7490 bp)

Figure 13M

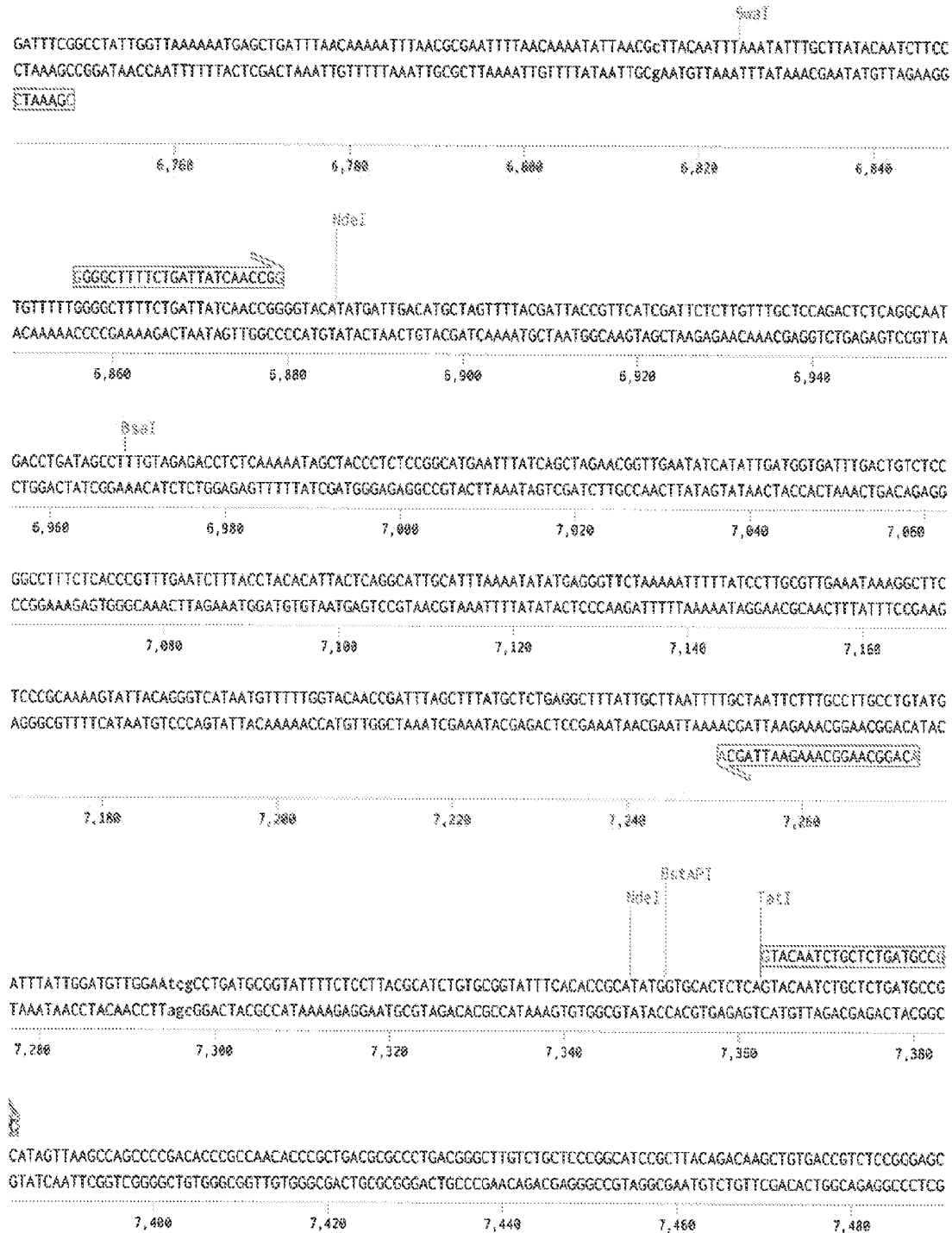


Figure 13N

pAAVΔINEPFO.GNE.MIRIKES.SHB-IGF1 KanR (7843 bp) (from 7491-7843 bp)

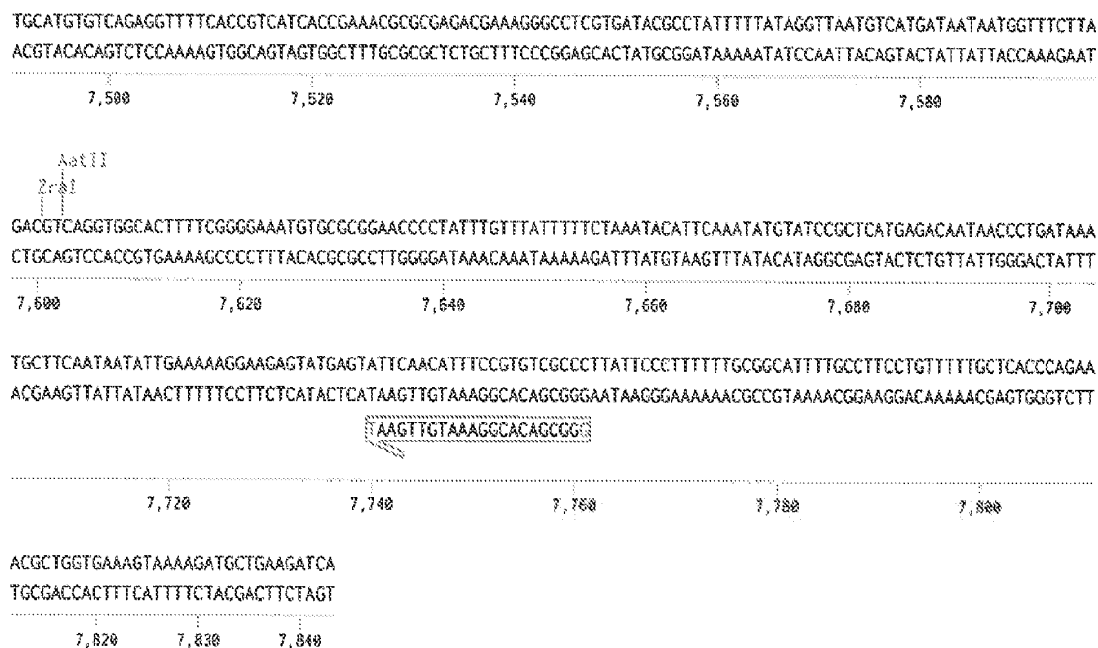


Figure 14A

pAAV.miniCMV.GNE.FL-FGF1 IRES.FST344 KanR (8034...

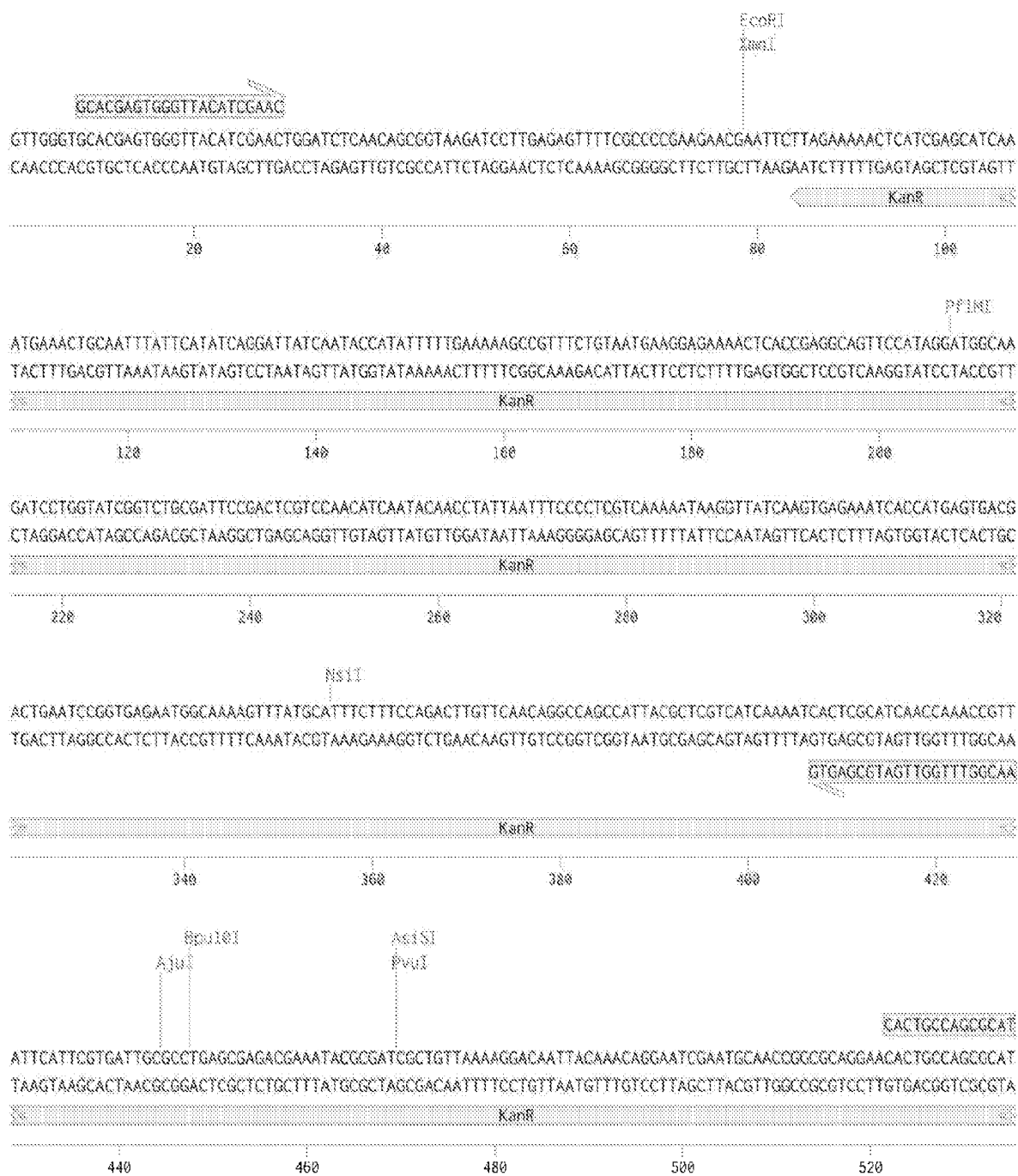


Figure 14B

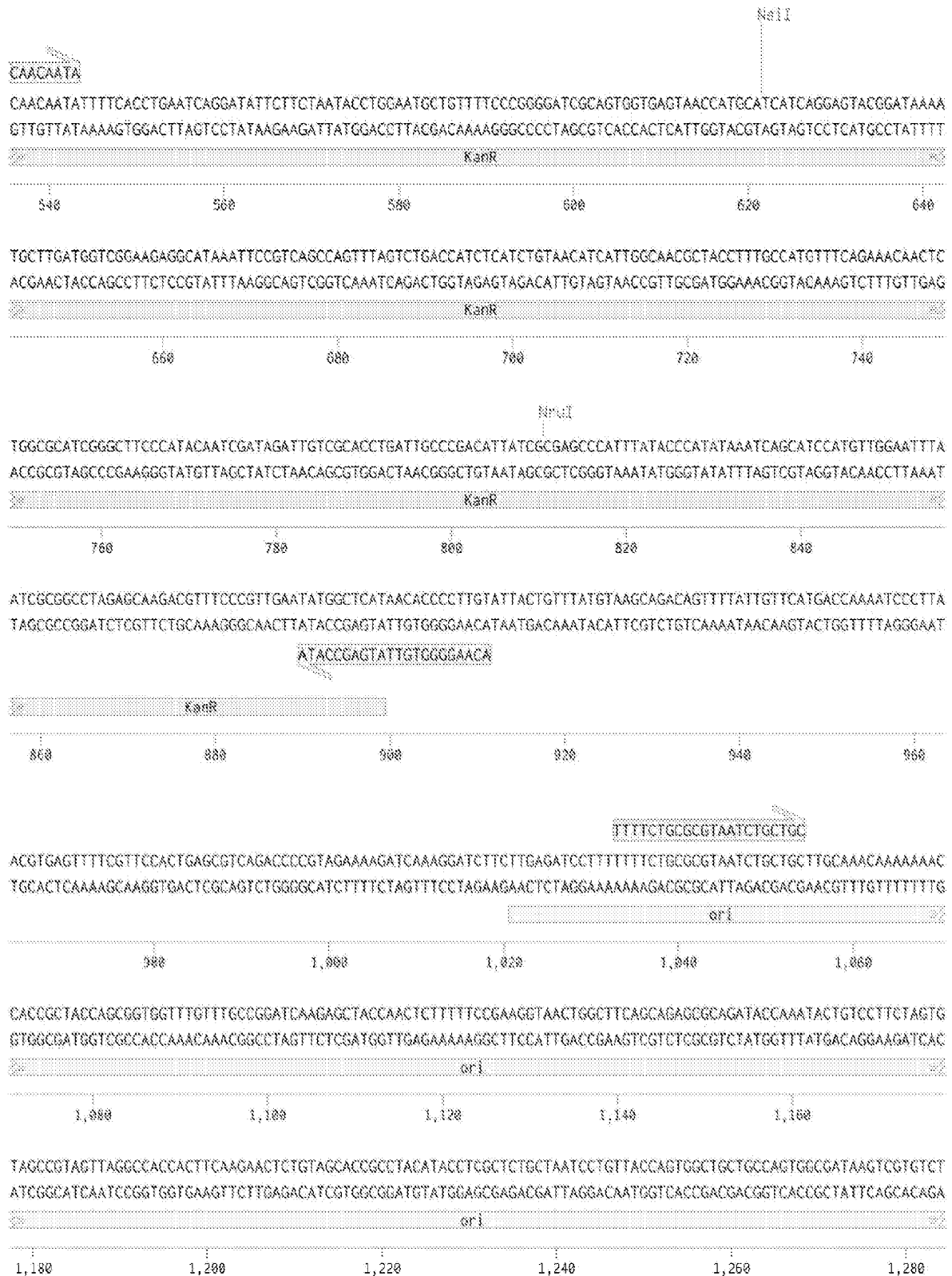


Figure 14C

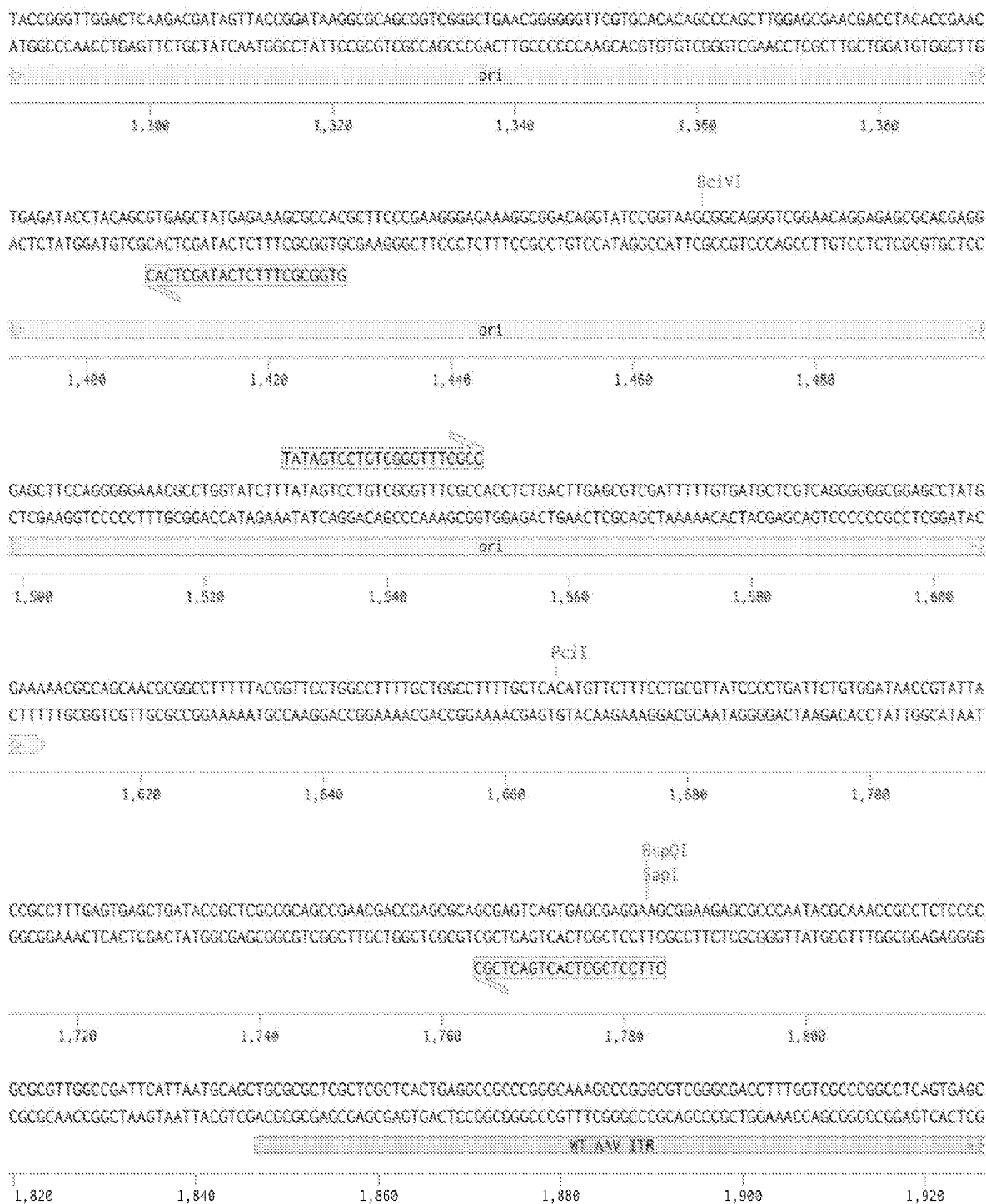


Figure 14D

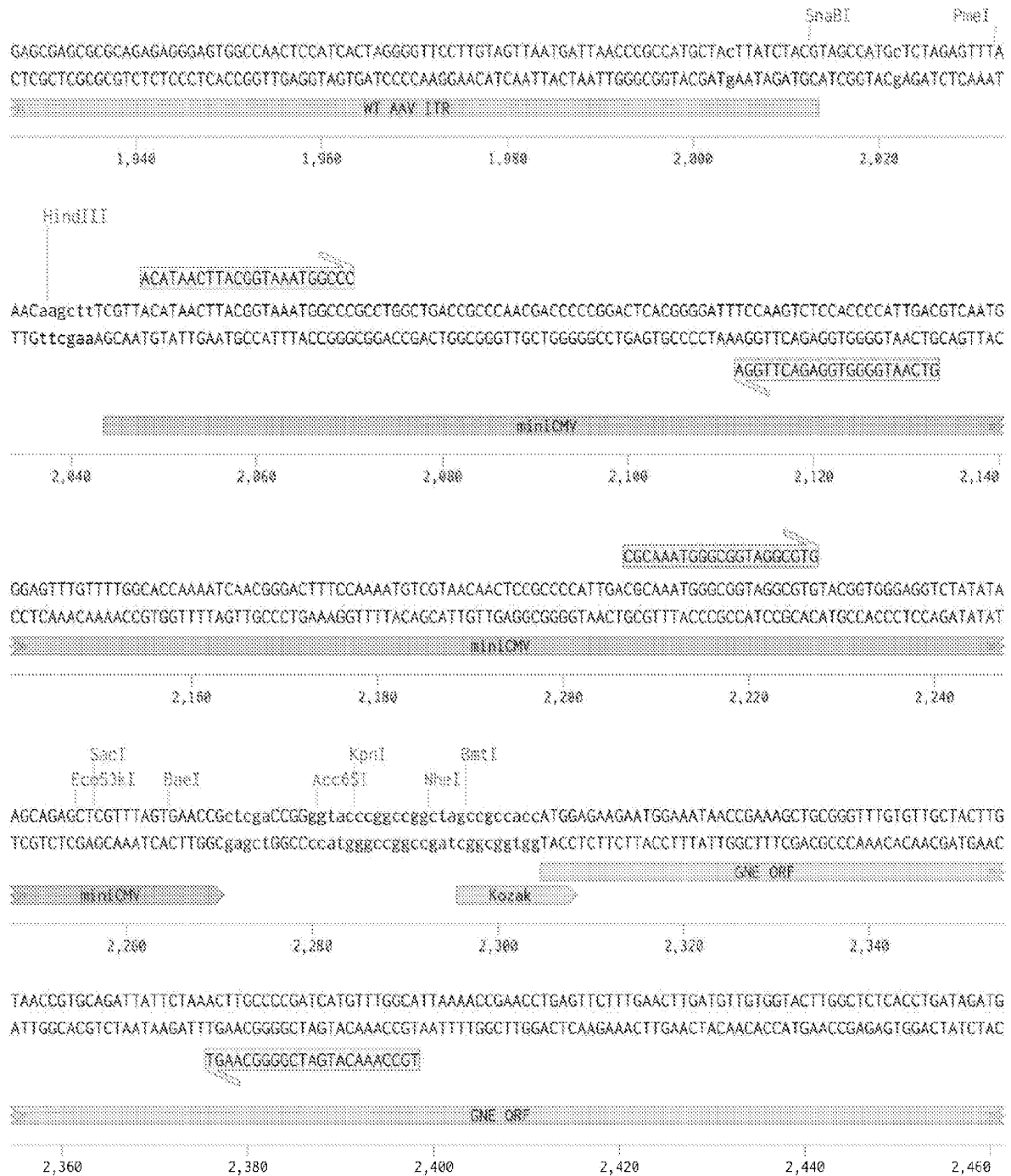


Figure 14E

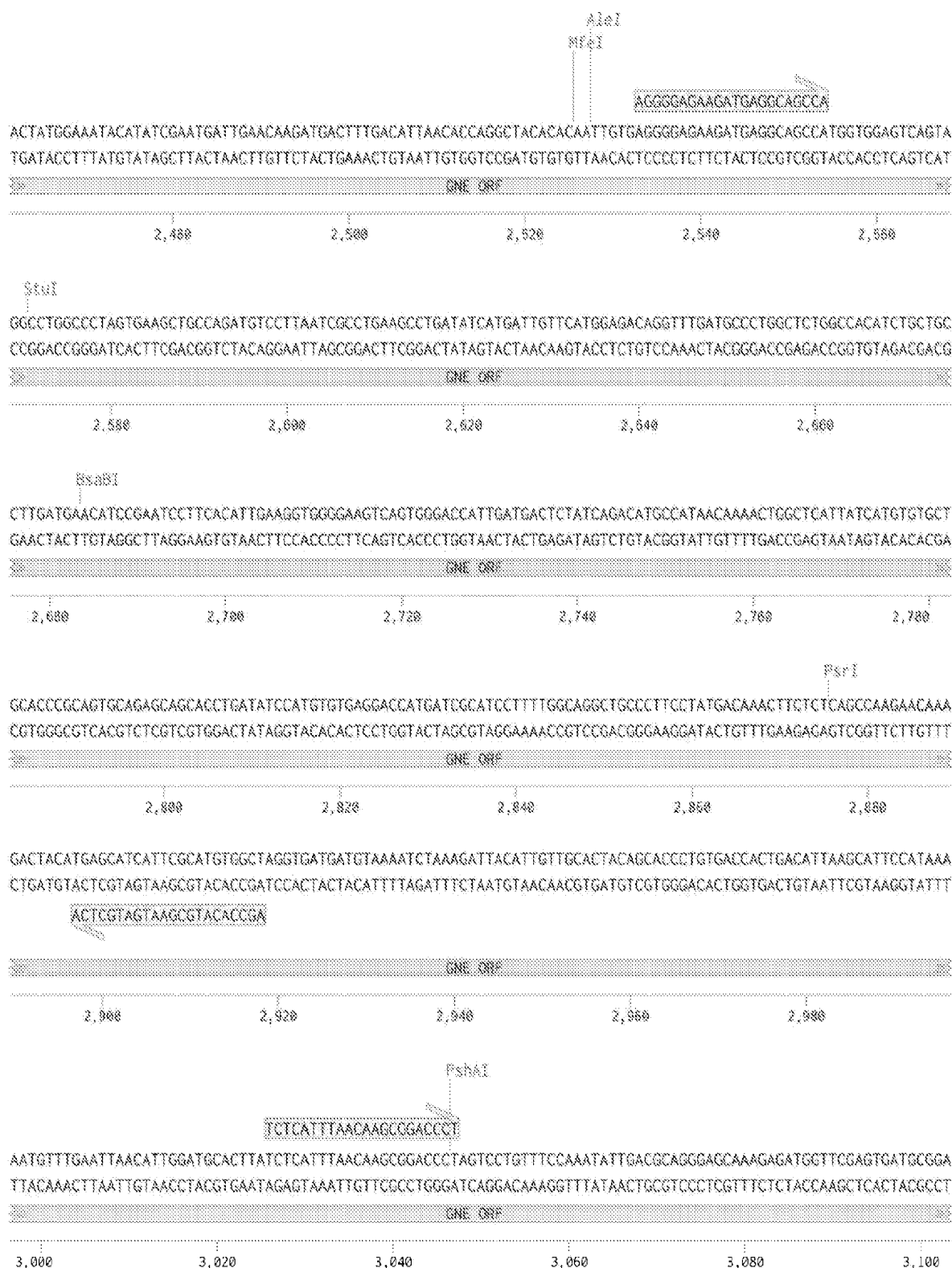


Figure 14F

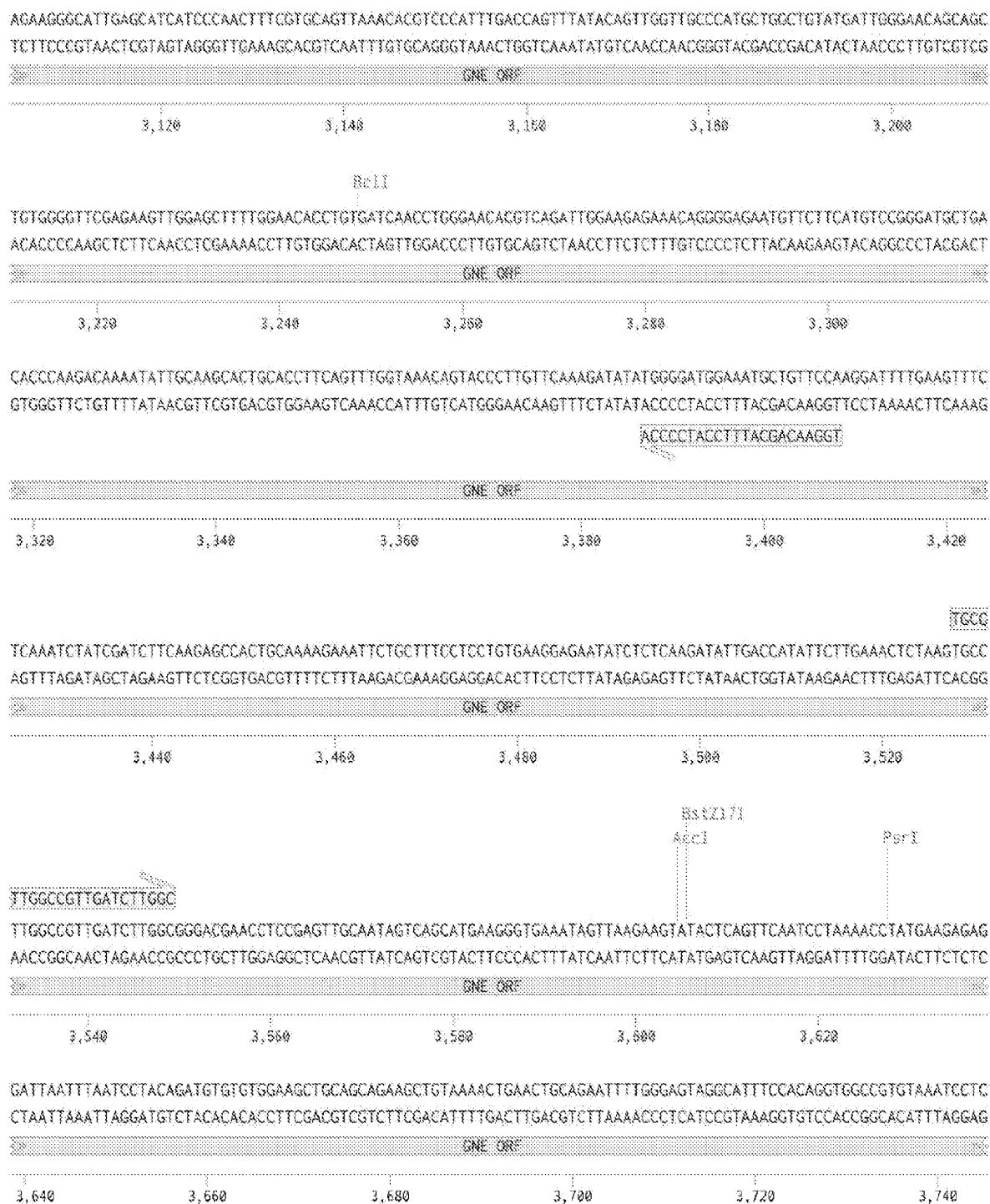
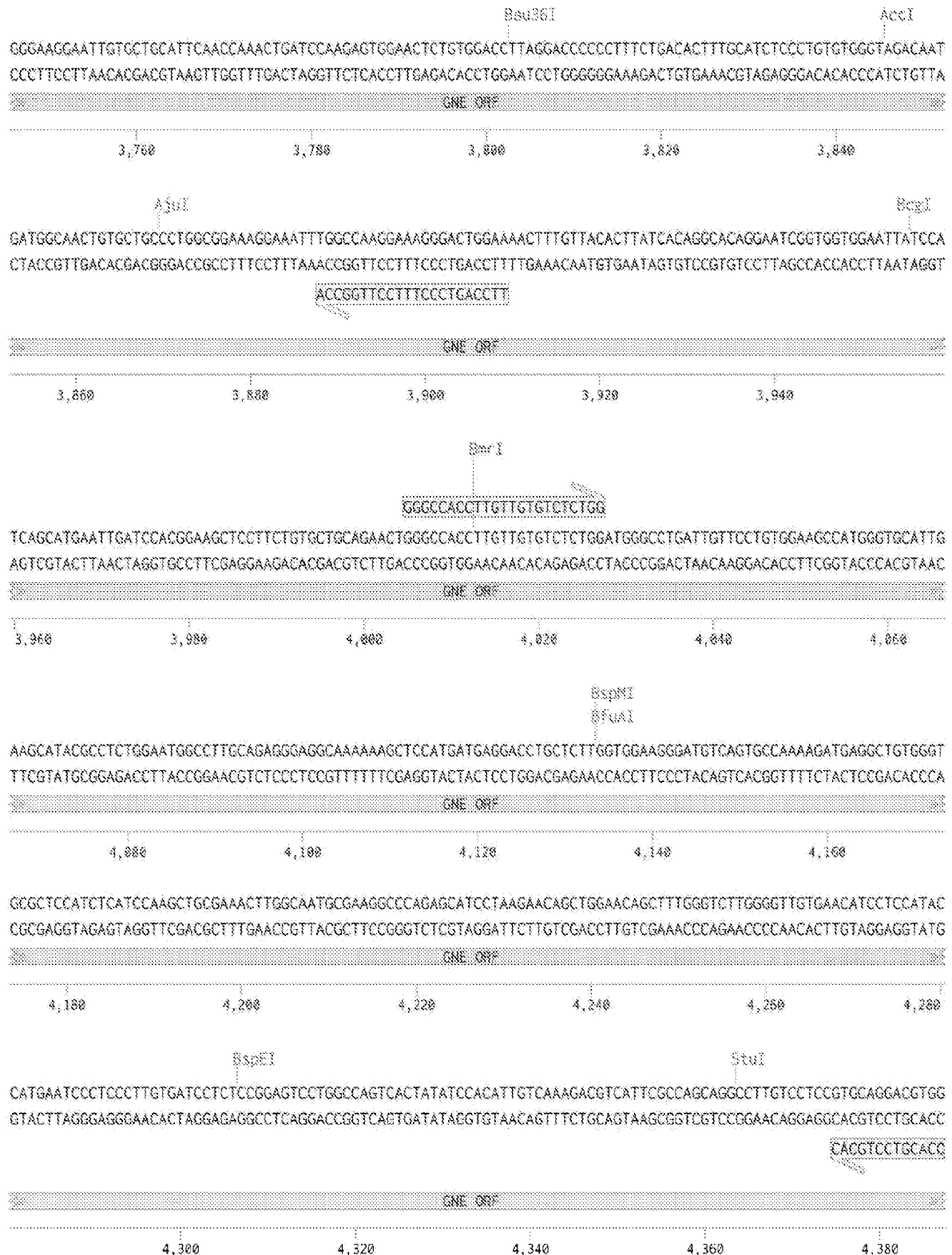


Figure 14G



ATGTGGTGGTTTCGGATTTCGGTTGACCCCGCCCTGCTGGGTGCTGCCAGCATGGTTCTGGACTACACAACACCGCAGGATCTACTAGcatgcCGGCATACCAAGTGTCA
TACACCACCAAAAGCCTAAACCAACTGGGGCGGACGACCCACGACGGTCTGTACCAAGACCTGATGTGTTGTGCGTCTAGATGATCgtacgCCCGTATGCTCACAGT
TACACCACC

HincII SphI

4,400 4,420 4,440 4,460 4,480

ONE ORF

IRES

4,480 4,500 4,520 4,540 4,560 4,580 4,600

ApalI
NheAIII
PspOMI

BamHI

GCTGCACTTGTAGGGGCCCAAGTGCCTCATGACCCACTCGGCAGCCTTCCTCTCCAGGATCCCAAGGCTAGGAGGCCAACCTACTAACAGGTGGGTGGGTATGGTG
CGAGTGAACATCCCCGGGTTACGCGAGTACTGGGTGAGCCGTGGAAGGAGAGGTCTAGGGGTTTCGATCCTCCGGTTGGATGATTGTCCACCCACCCATACCAAC

IRES

4,580 4,600 4,620 4,640 4,660 4,680 4,700

SacI
Eco53kI

BamHI

BtgZI

TGTGGTTTCACTCAGTCTCTTCATGGGTTTCTCTGAGCTCCATTATACAGAAAGGAGCAGGAGAGAGAGACAAGTGGATCCAACACCCCTTCGCTCCAGGGG
ACACCAAGTGAAGTCAAGAAGAGTACCCCAAAGAGACTCGAGGTAAGTATGGTCTTTCCCTCGTCTCTCTCTCTCTCTGTTACCTAGGTTGTCCGAAGCGAGGTCCCC

IRES

4,680 4,700 4,720 4,740 4,760 4,780 4,800

minimal IRES region

IRES

4,780 4,800 4,820 4,840 4,860 4,880 4,900 4,920

SpelI

TGGACATTGCAGAAAGCTGTCACTGCCCCAGAAAGAAAGCACCCAGAGCCAAAGGCAAGAGTCTTGAAGCGCCACAAGCAGCAGCTCTGAGactagtagtGTCCG
ACCTGTAACGTCTTCGACAGTGACGGGTCTTTCCTTCGTTGGGTCTCGGTTCCGTTTCTCAGAACCTTCGCGGTGTTCTGTCGTGACGAGCTctgatcaTACCAGGC

minimal IRES region

IRES

4,920 4,940 4,960 4,980 5,000 5,020

PFIMI

EST344

4,940 4,960 4,980 5,000 5,020

Figure 14f

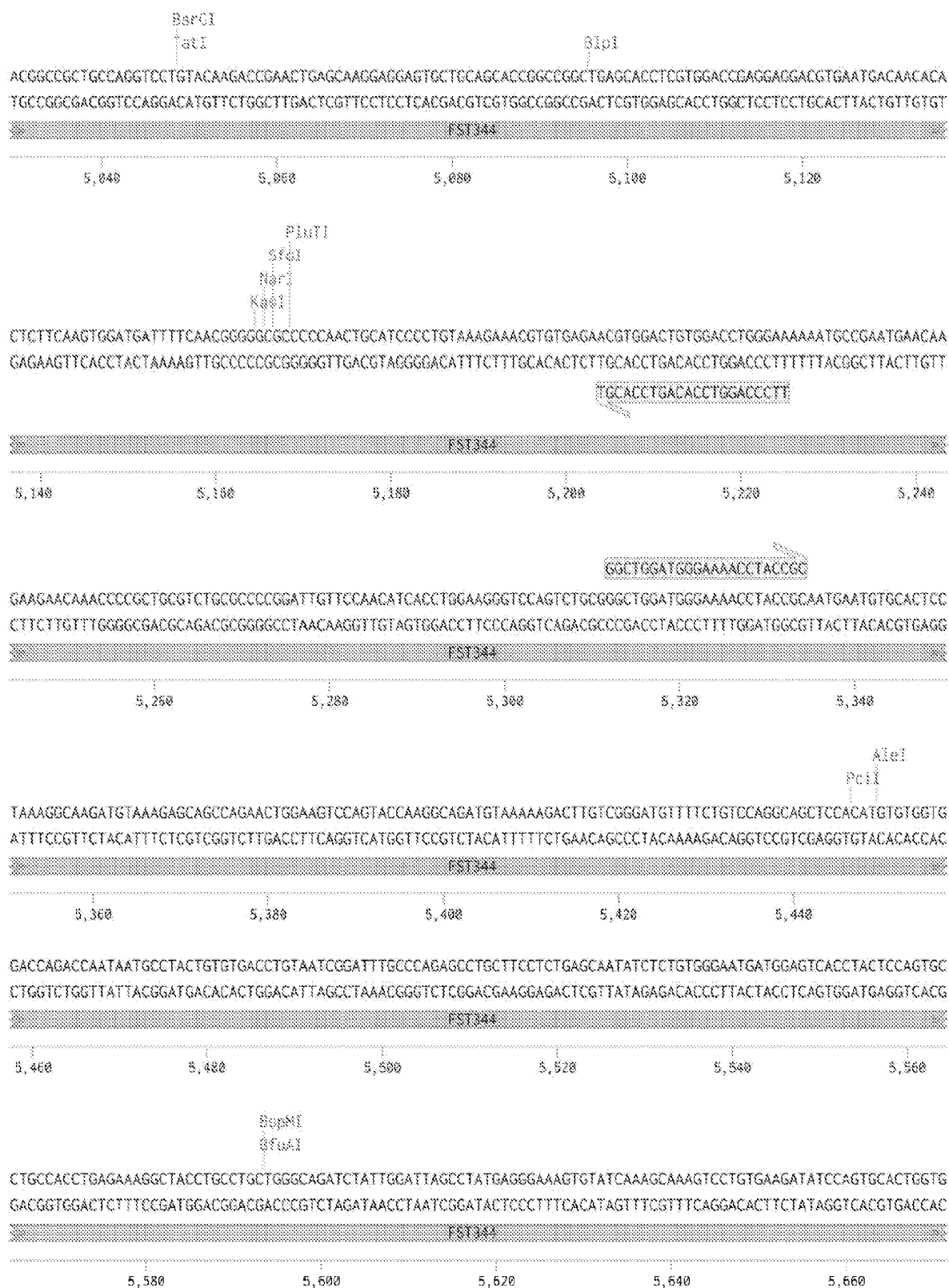


Figure 14J

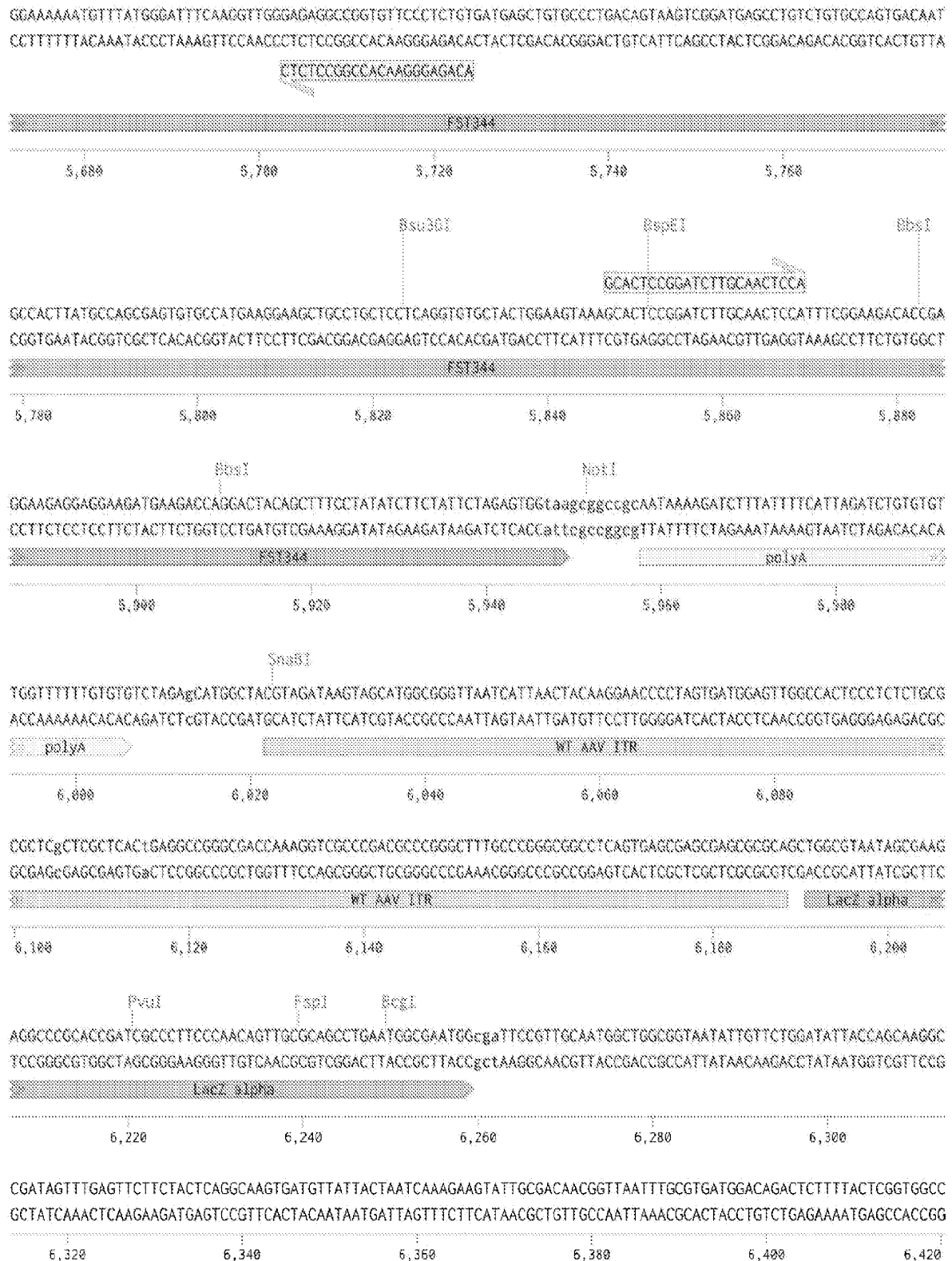


Figure 14K

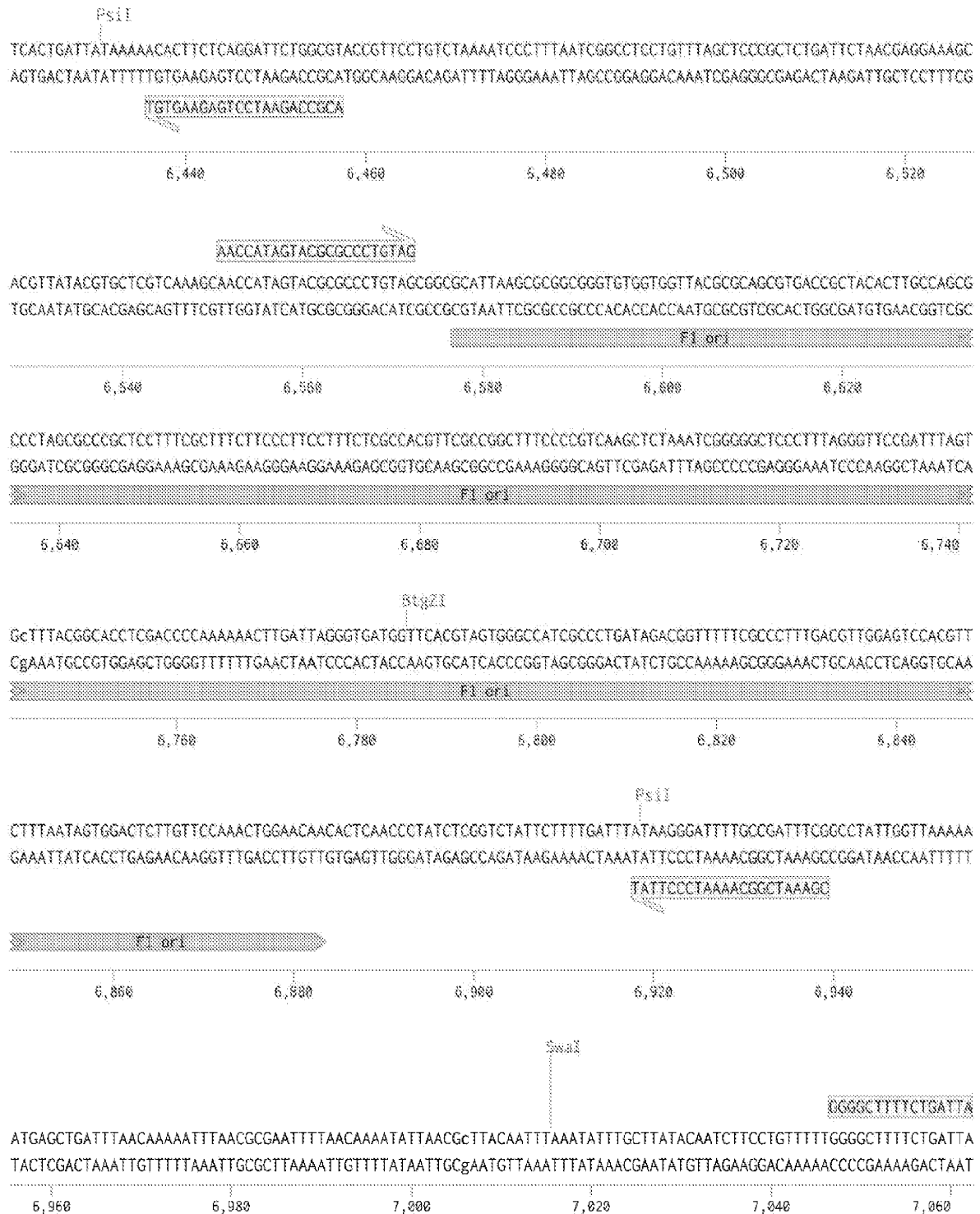


Figure 14L

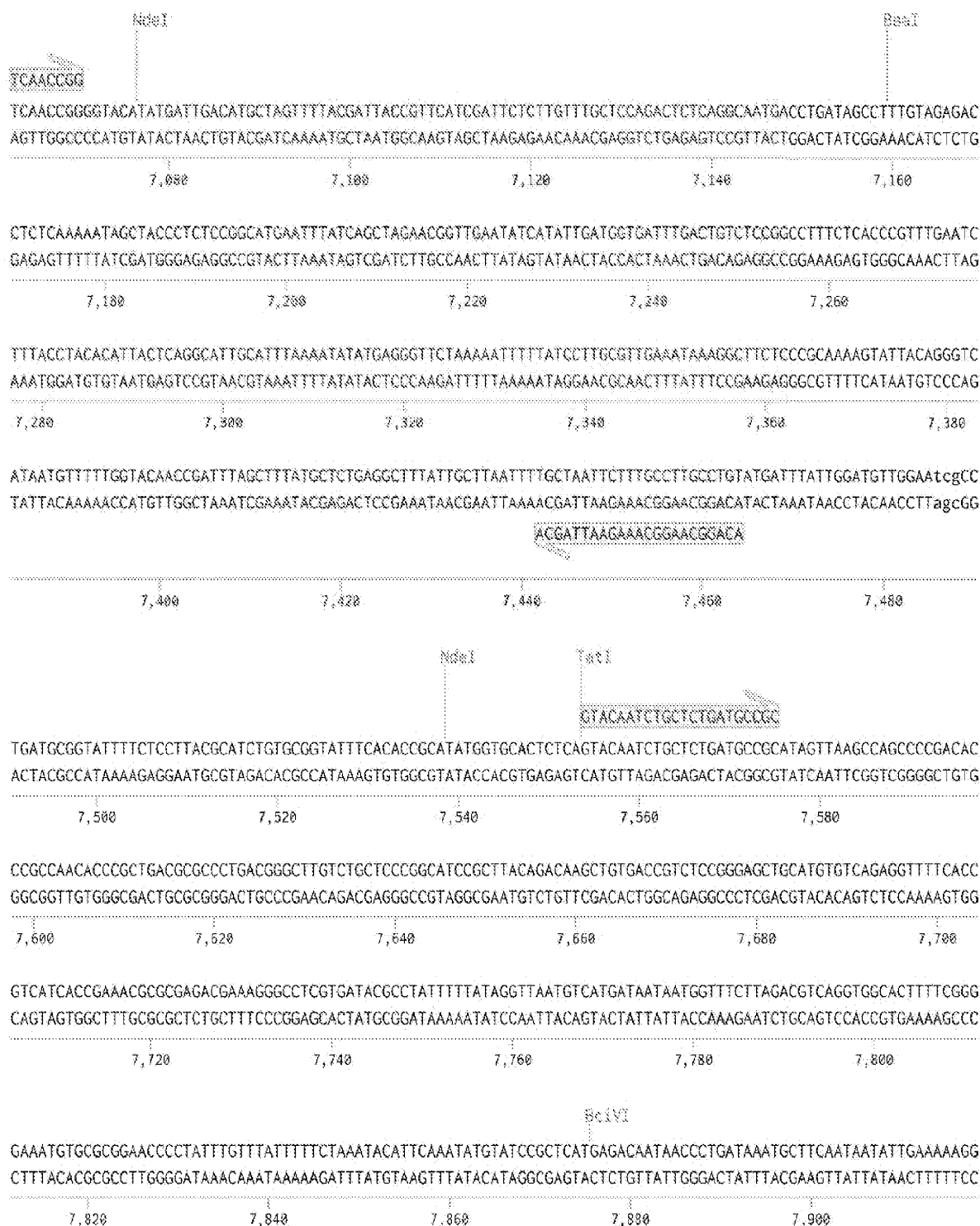


Figure 14M

AAGAGTATGAGTATTCAACATTTCCGTGTCGCCCTTATTCCTTTTTTGCGGCATTTGCCTTCCTGTTTTGCTCACCAGAAACGCTGGTGAAAGTAAAAGATGC
TTCTCATACTCATAAGTTGTAAGGCACAGCGGAATAAGGGAAAAACGCCGTAAACGGAAGGACAAAAACGAGTGGGTCTTTGCGACCACTTCATTTTCTACG
TAAATTGTAAAGGCACAGCGG

7,920 7,940 7,960 7,980 8,000 8,020

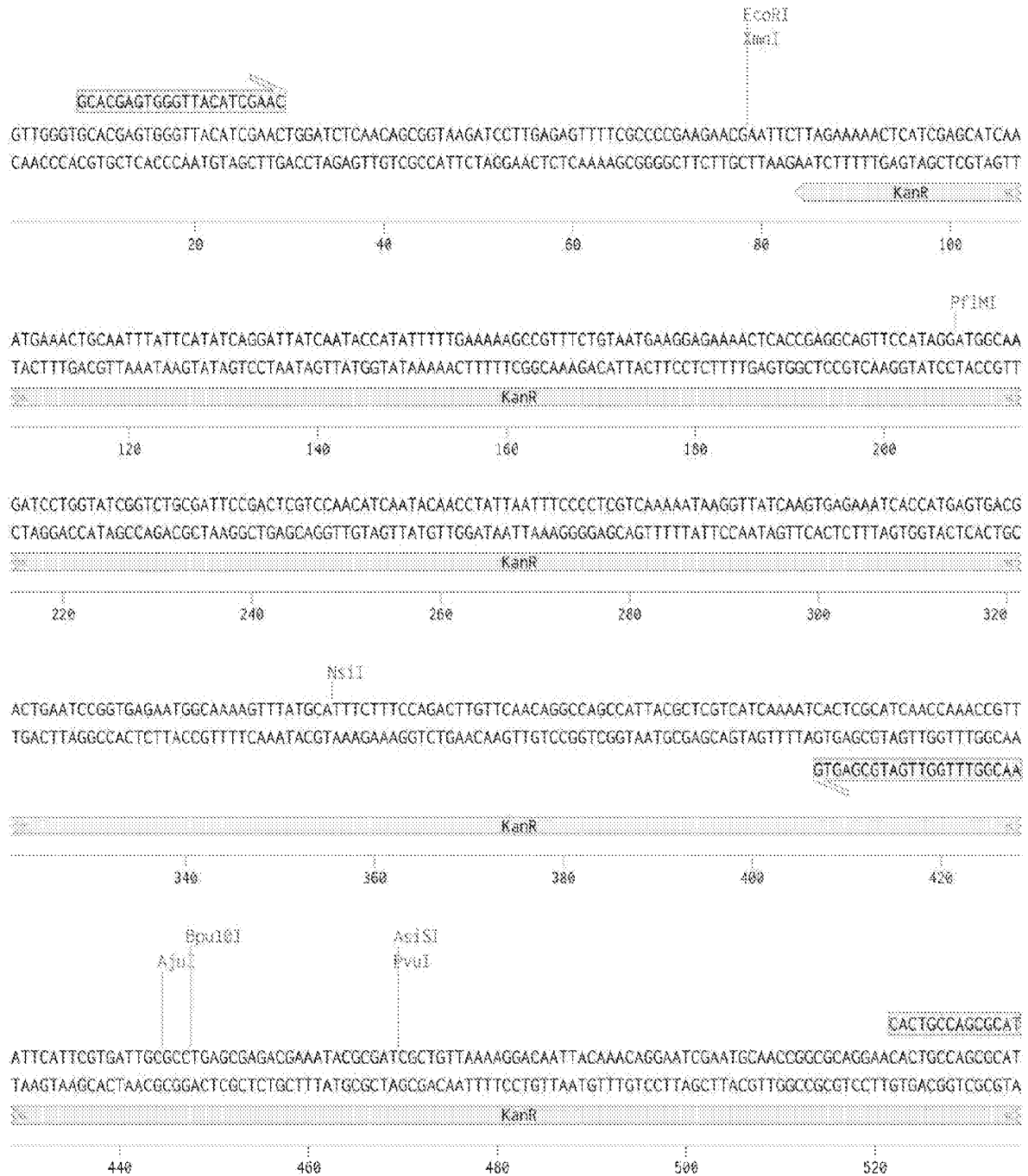
TGAAGATCA

ACTTCTAGT

8,030

Figure 15A

pAAV.miniCMV.GNE.FL-FGF1 IRES.sHB-IGF1 KanR (75...



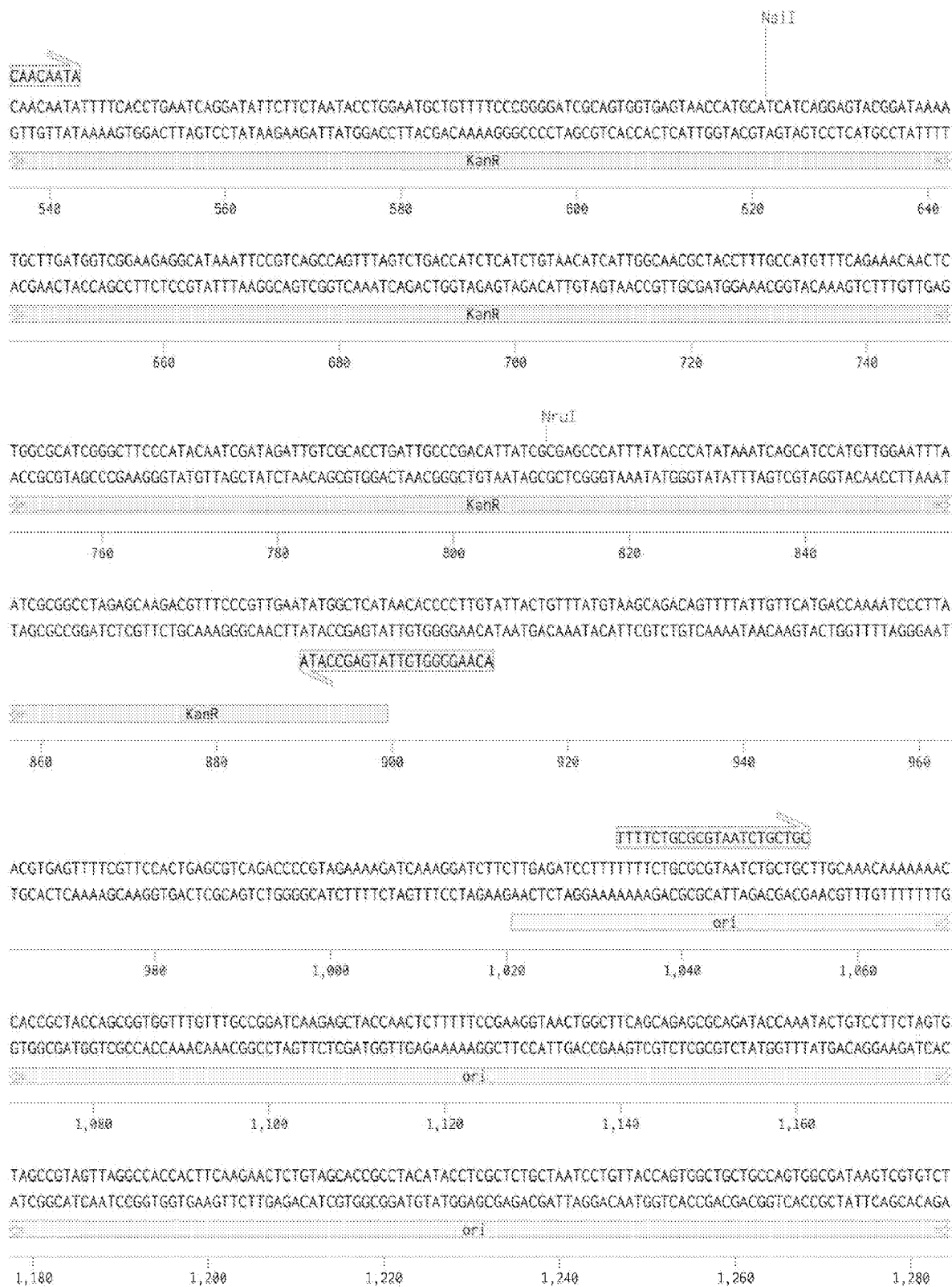


Figure 15C

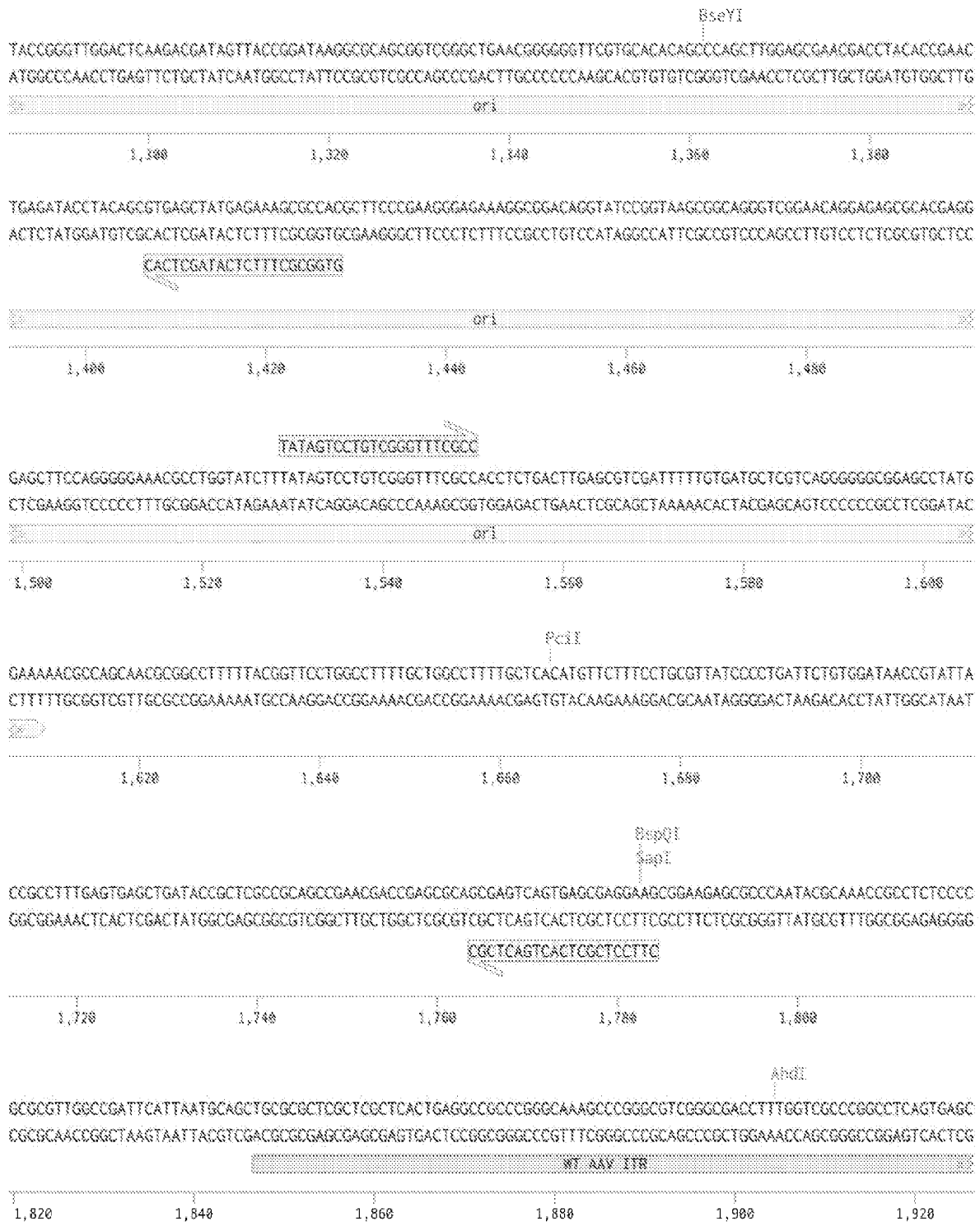


Figure 15D

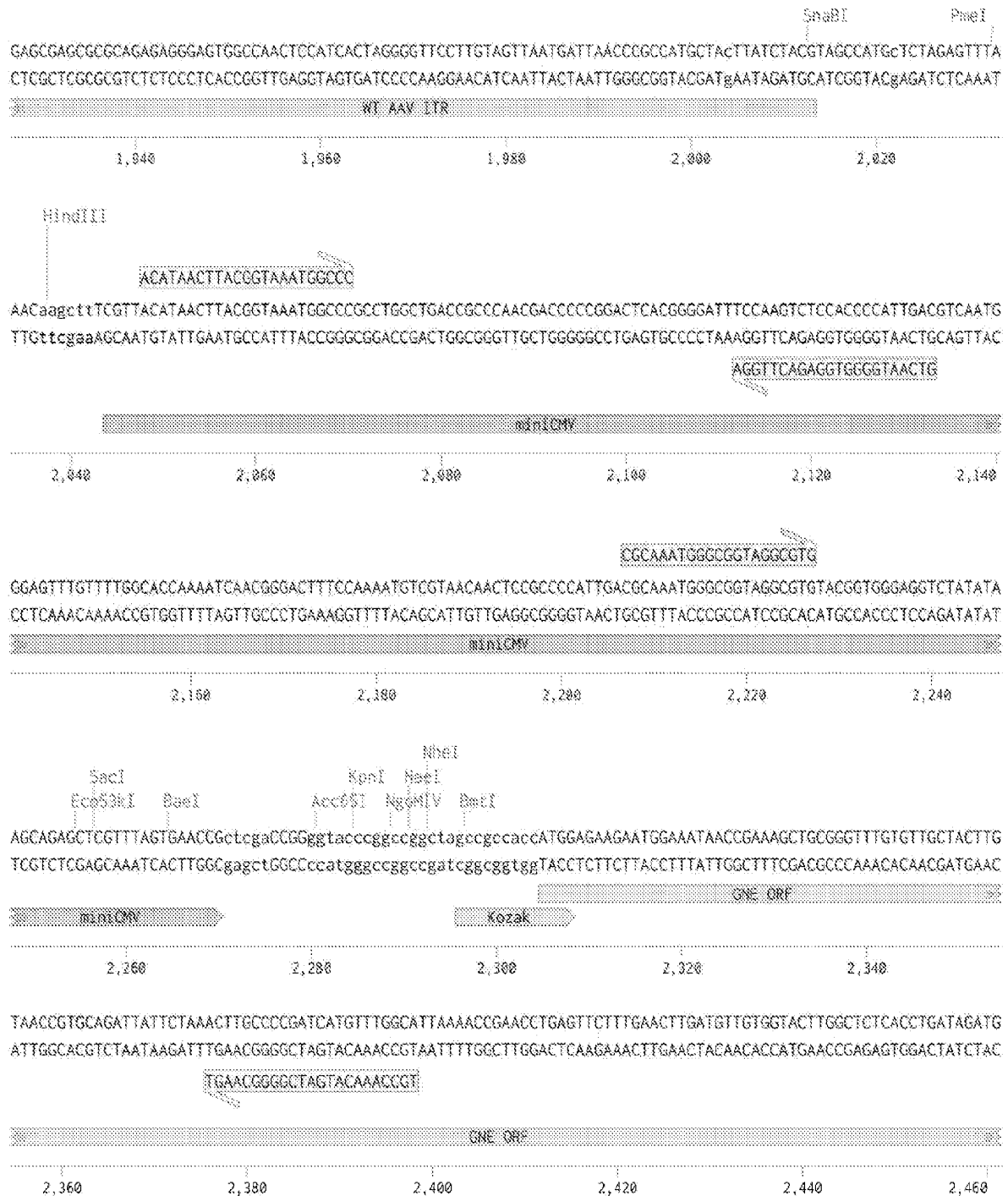


Figure 15E

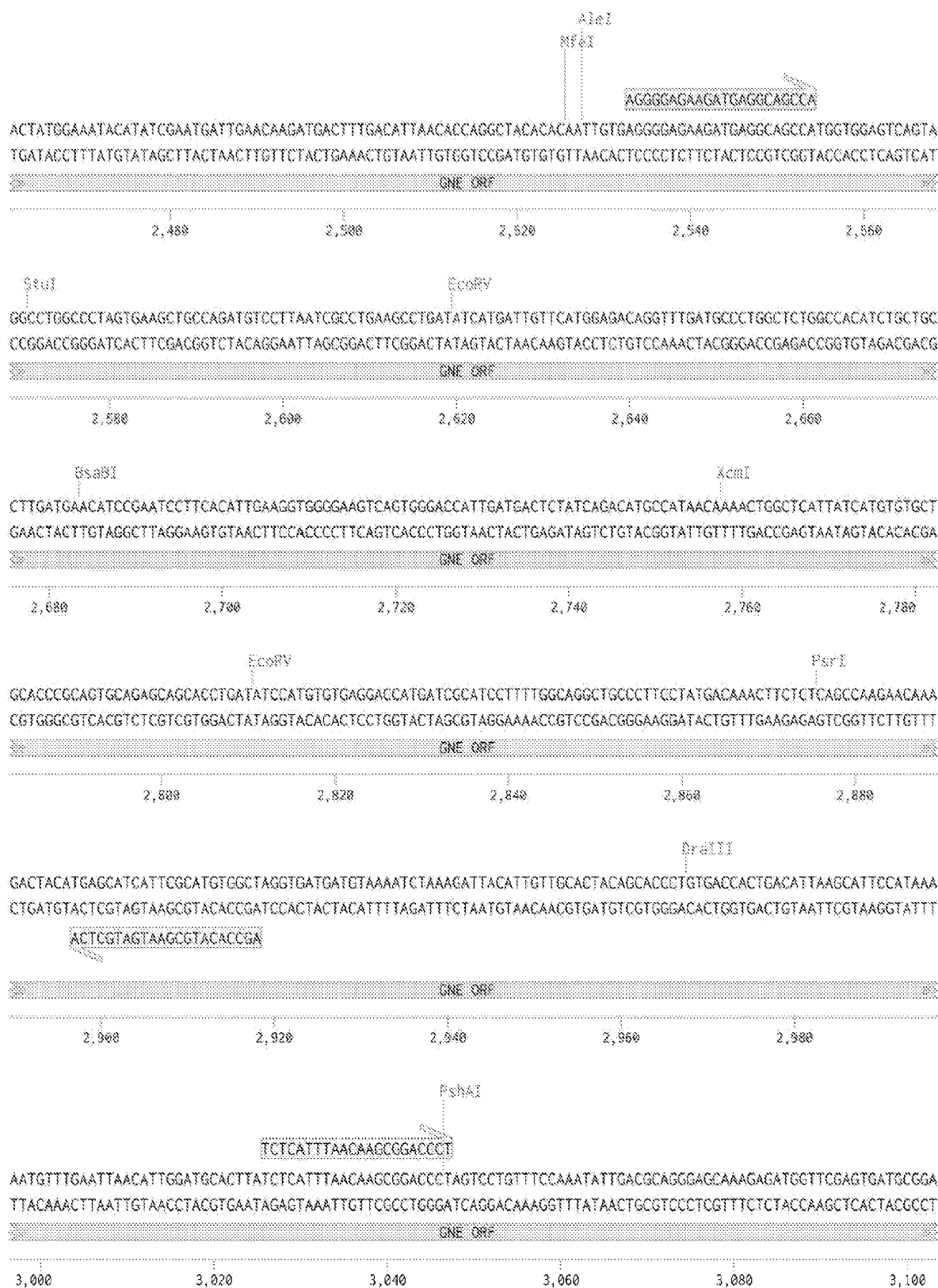
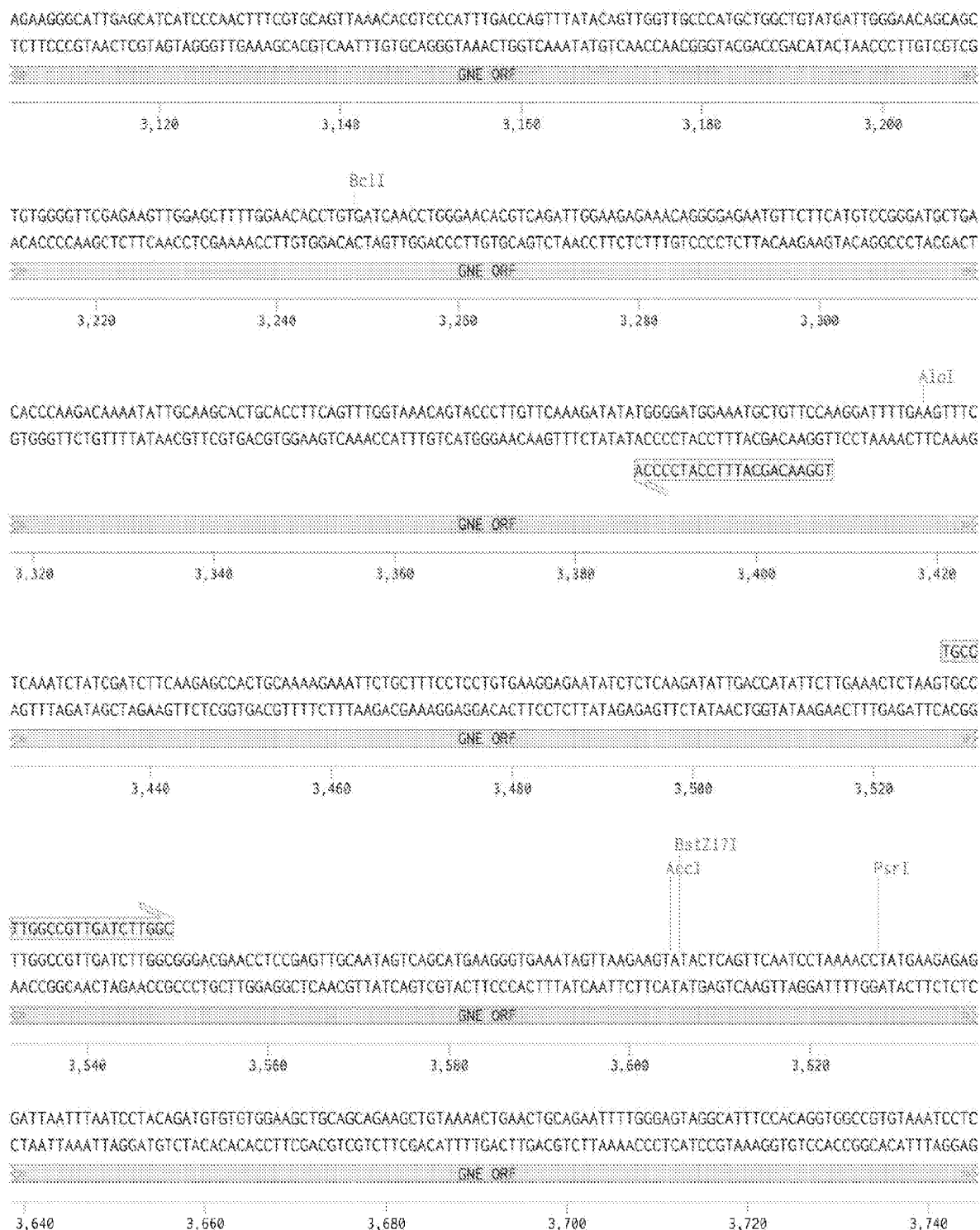
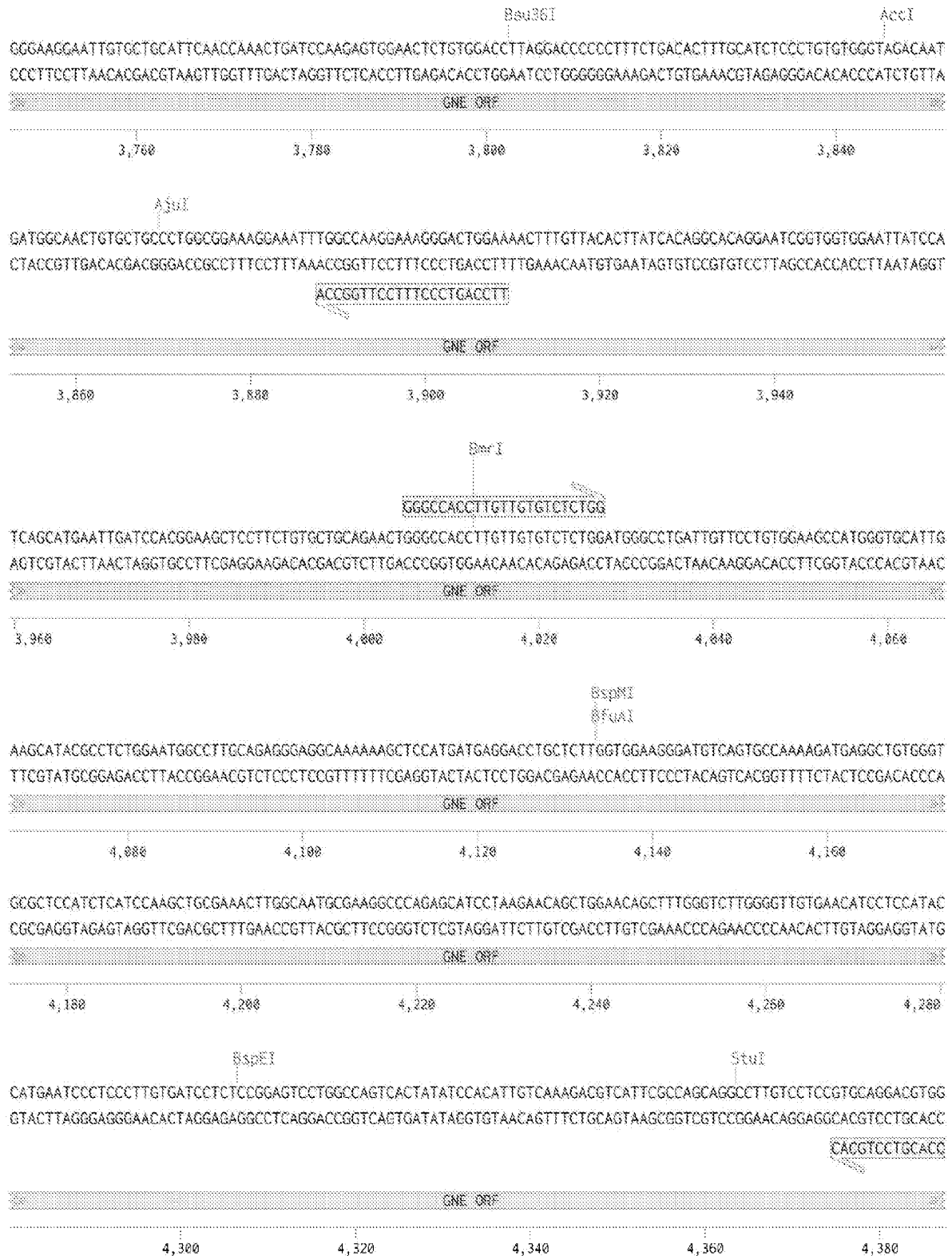


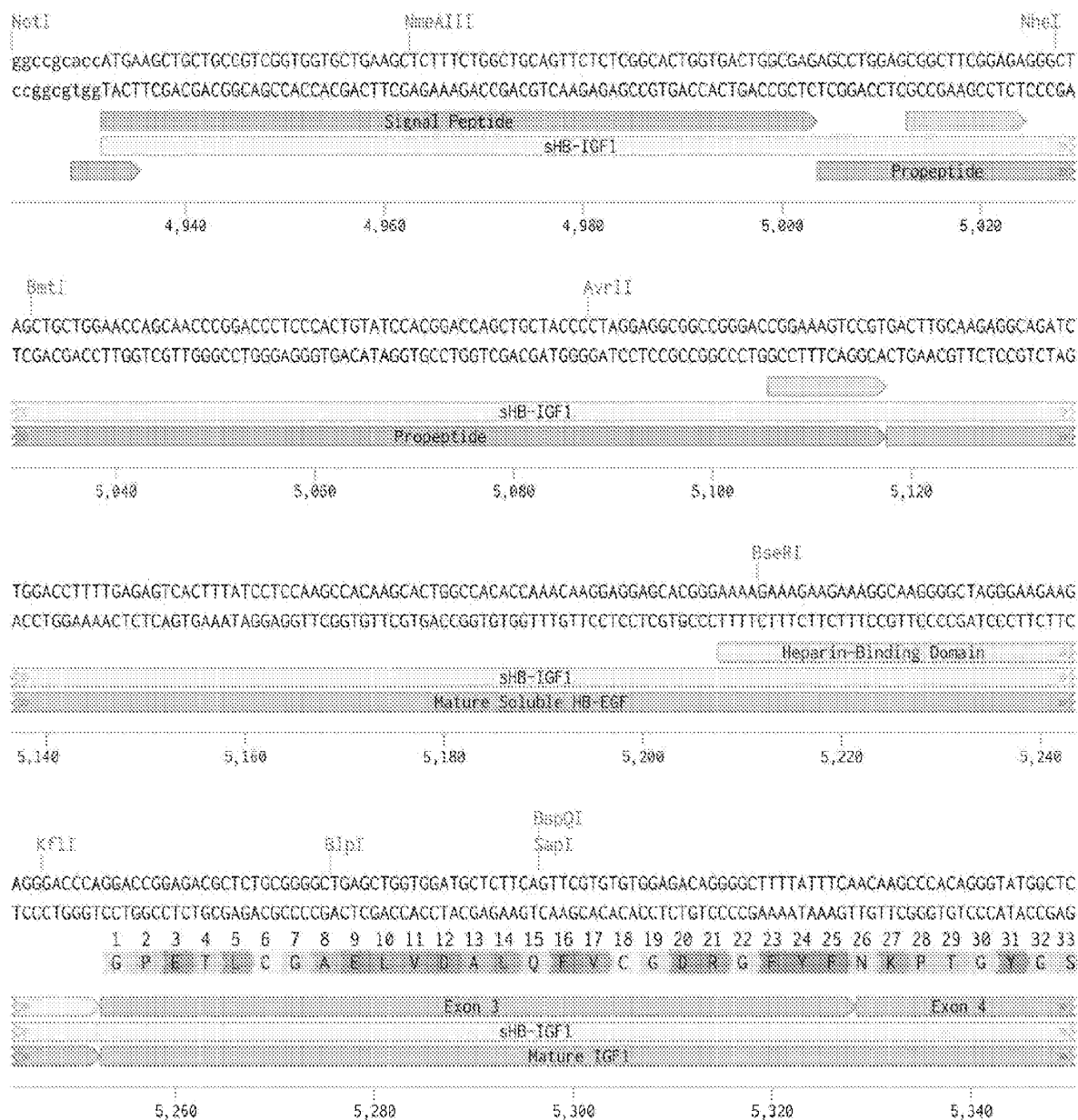
Figure 15F





[illegible]

Figure 15i



PluI
 SfiI
 NotI
 KpnI
 BspEI
 FspI
 CAGCAGTCCGAGGGCGCCTCAGACAGGCATCGTGGATGAGTGCTGCTTCCGAGCTGTGATCTAAGGAGGCTGGAGATGTATTGCGCACCCCTCAAGCCTGCCAAGT
 GTCGTGACGCTCCCGCGGAGTCTGTCCGTAGCACCTACTCACGACGAAGGCCTCGACACTAGATTCTCCGACCTCTACATAACGCGTGGGAGGTTCCGACGGTTCA
 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68
 S S R R A P Q T G I V D E C C F R S C D L R R L E M Y C A P L K P A K
 Exon 4
 sHB-IGF1
 Mature IGF1
 5,360 5,380 5,400 5,420 5,440
 NotI
 BpuI91
 SnaBI
 CAGCTTAGGCGGCCGCCACCgcaATAAAAGATCTTTATTTTCATTAGATCTGTGTGTTGGTTTTTGTGTGTCTAGAGCATGGCTACGTAGATAAGTAGCATGGCGG
 GTCGAATCCGCCGCGGTGGcgTTATTTCTAGAAATAAAAGTAATCTAGACACACAACCAAAAAACACACAGATCTcGTACCGATGCATCTATTATCATCGTACCGCC
 69 70
 S A
 polyA
 WT AAV ITR
 5,460 5,480 5,500 5,520 5,540 5,560
 AbcI
 GTTAATCATTAACTACAAGGAACCCCTAGTGATGGAGTTGGCCACTCCCTCTCTGCGGCTCgCTCGCTCAGTGGGCCGGGCGACCAAGGTCGCCGACGCCCGG
 CAATTAGTAATTGATGTTCCCTTGGGATCACTACCTCAACCGGTGAGGGAGAGACGCGCGAGcGAGCGAGTGaCTCCGCCCCGTGGTTTCCAGCGGGCTGCGGGCC
 WT AAV ITR
 5,580 5,600 5,620 5,640 5,660
 PvuI
 FspI
 GCTTTGCCCGGGCGGCTCAGTGAGCGAGCGAGCGCGCAGCTGGCGTAATACCGAAGAGGGCCGACCGATCGCCCTTCCCAACAGTTGCGCAGCCTGAATGGCGAA
 CGAAACGGGCCCGCGGAGTCACTCGCTCGCTCGCGCGTCAACCGCATTATCGCTTCTCCGGGCTGGCTAGCGGGAAGGGTTGTCAACGCGTCGGACTTACCGCTT
 WT AAV ITR
 LacZ alpha
 5,680 5,700 5,720 5,740 5,760
 TGGcgaTTCCGTTGCAATGGTGGCGGTAATATTGTTCTGGATATTACCAGCAAGGCCGATAGTTTGAGTCTTCTACTCAGGCAAGTGATGTTATTACTAATAAA
 ACCgctaAGGCAACGTTACCGACCGCCATTATAACAAGACCTATAATGGTGGTCCGGCTATCAAACCTCAAGAAGATGAGTCCGTTCACTACAATAATGATTAGTTT
 5,780 5,800 5,820 5,840 5,860 5,880

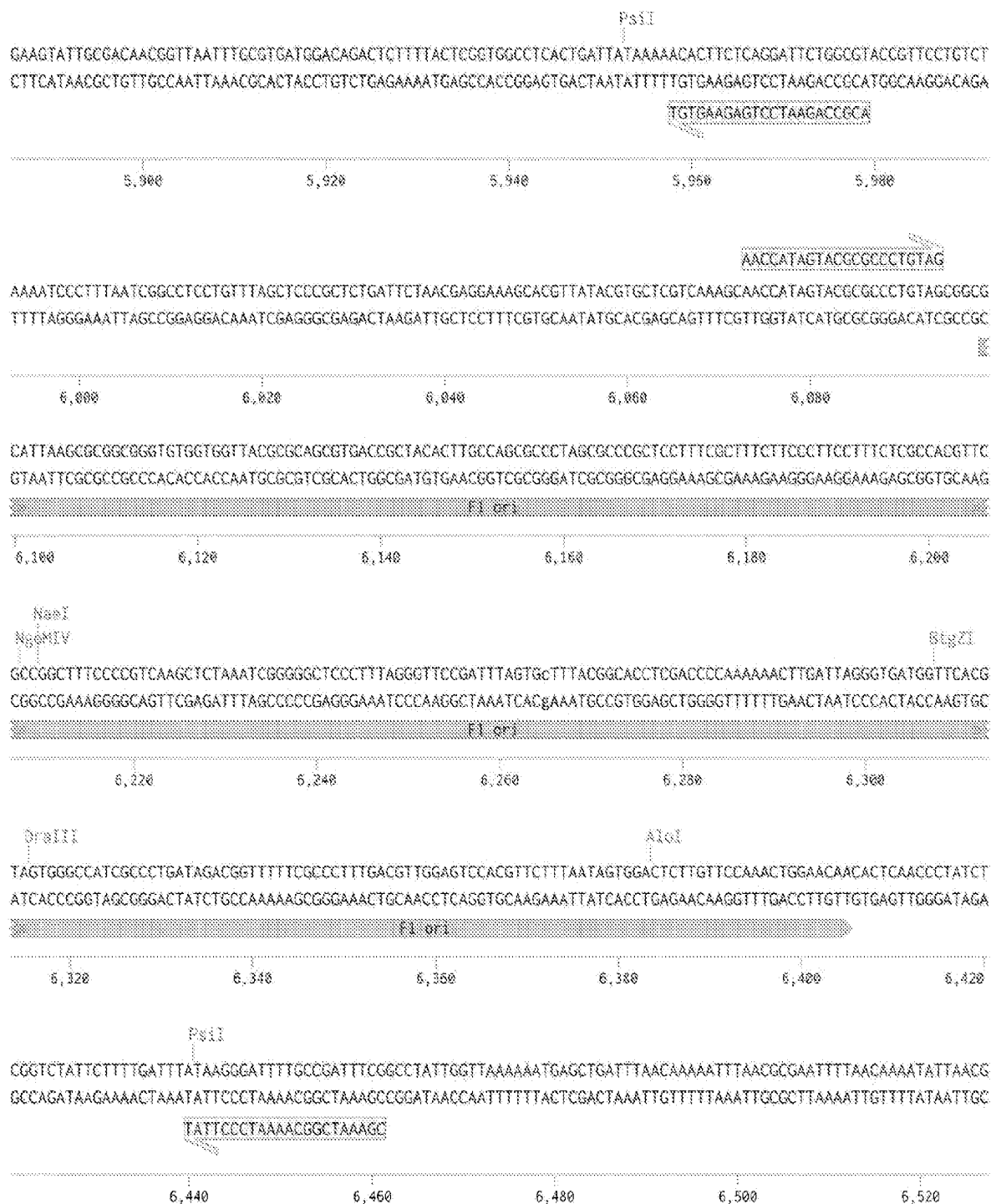


Figure 15L

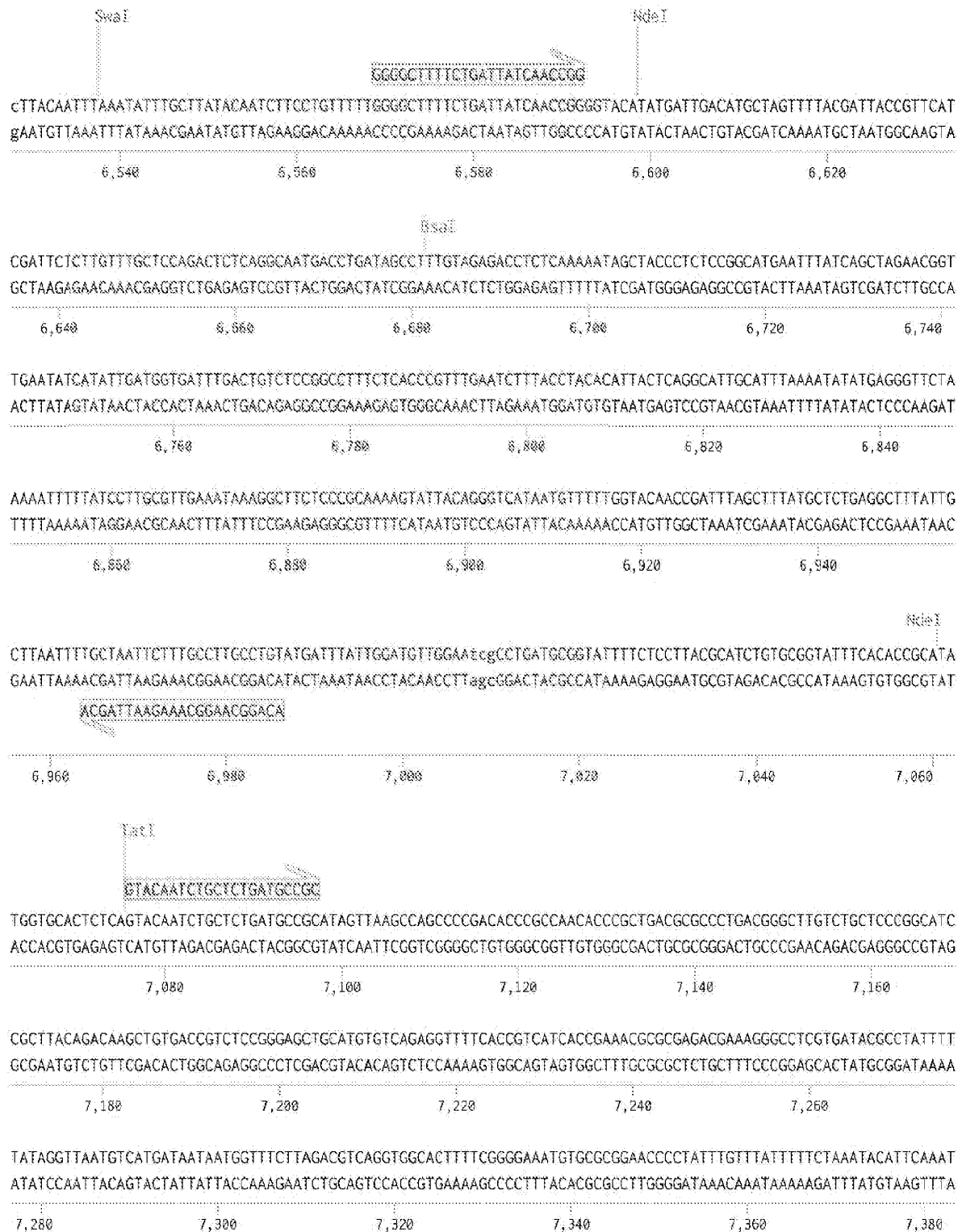
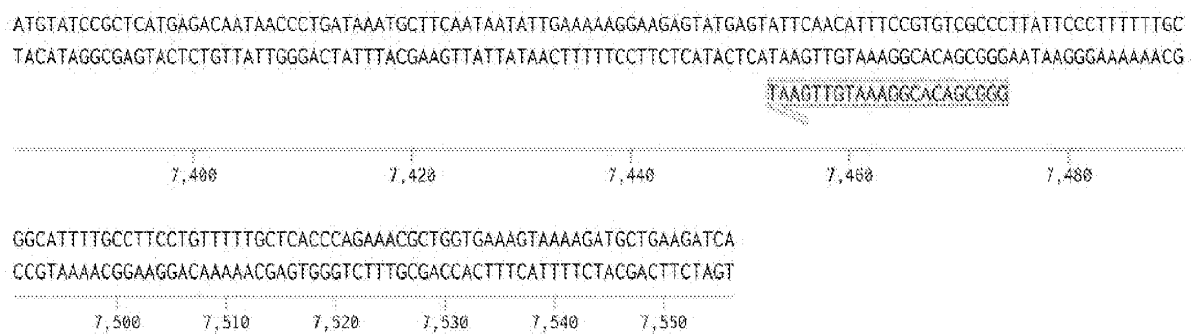
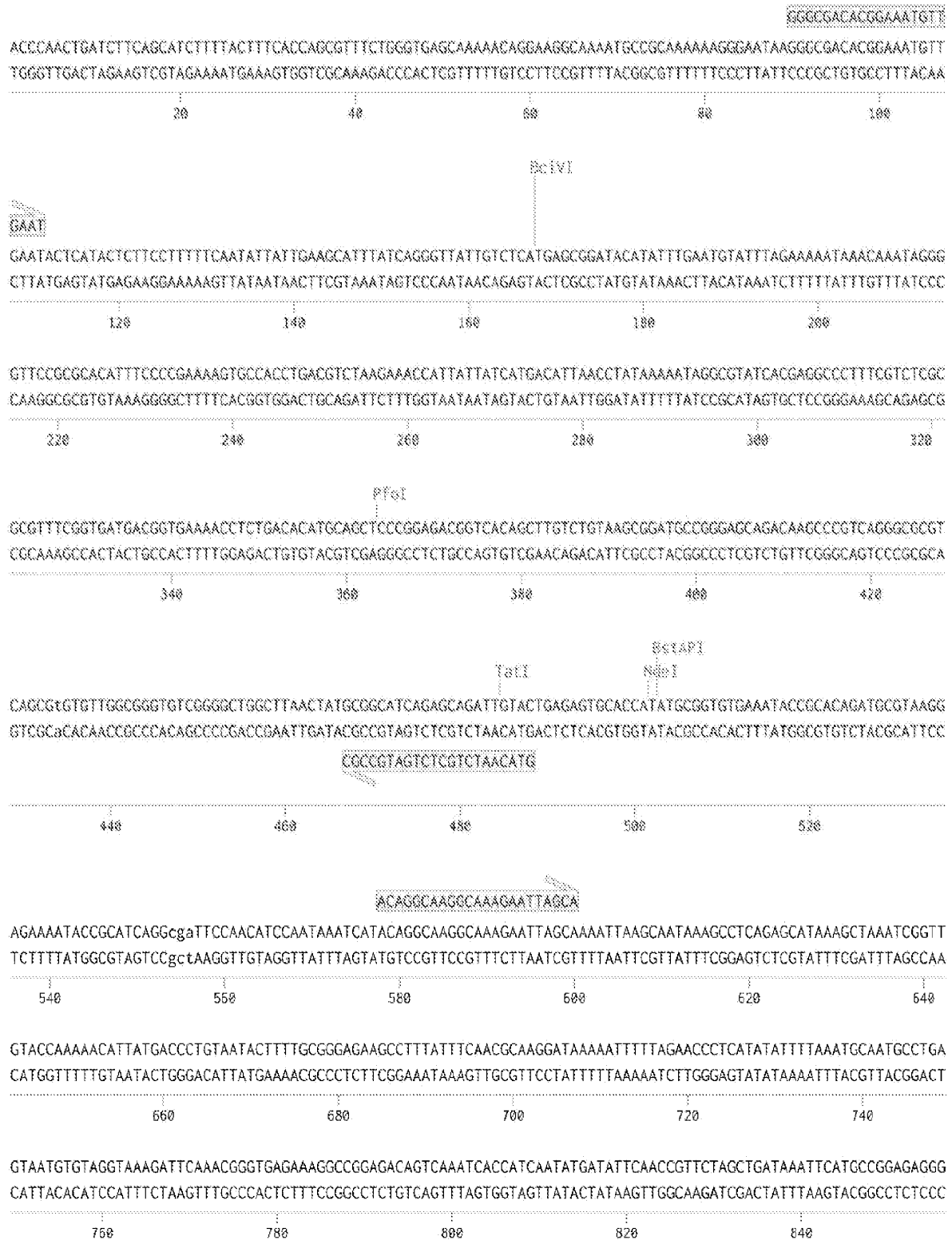
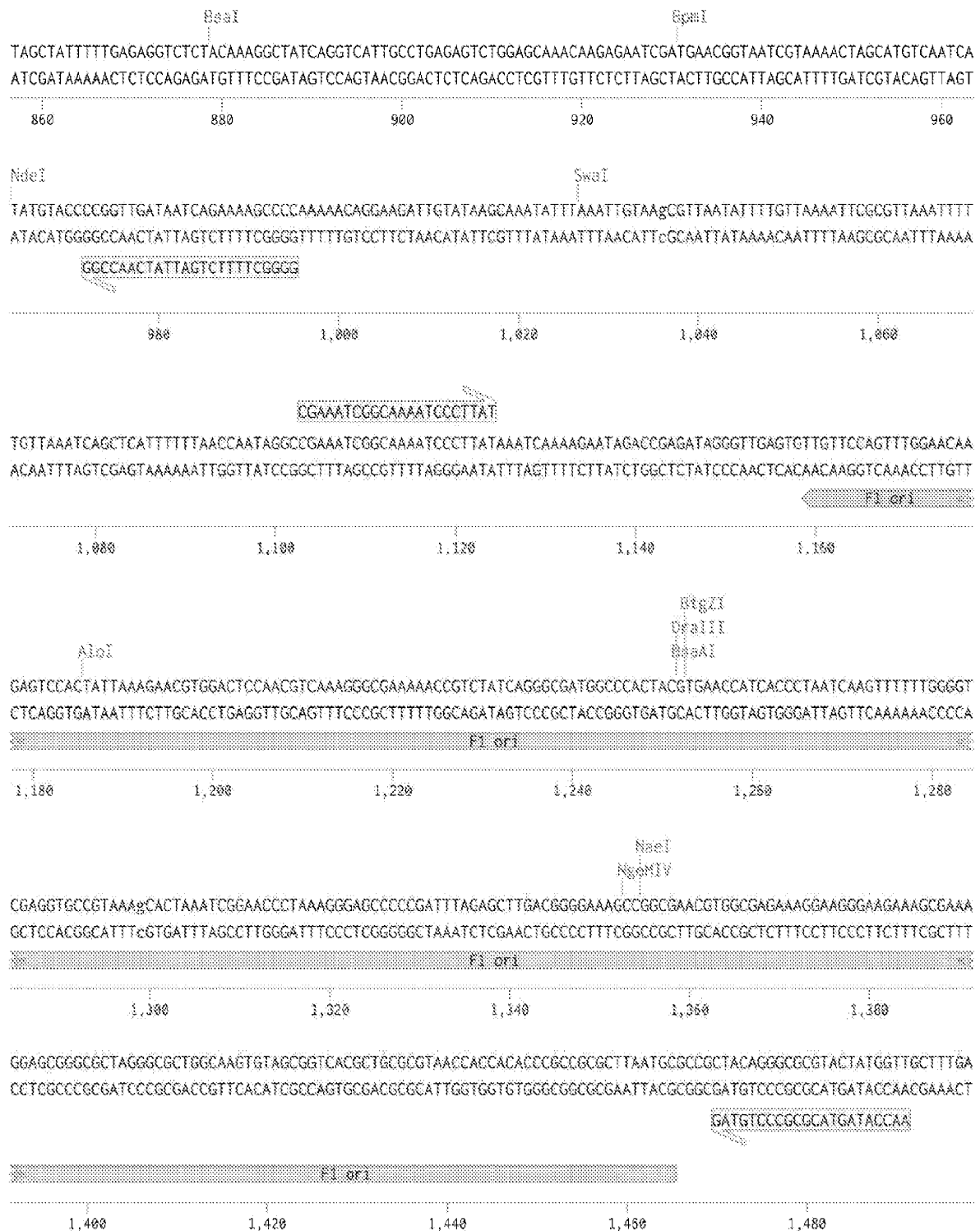


Figure 15M



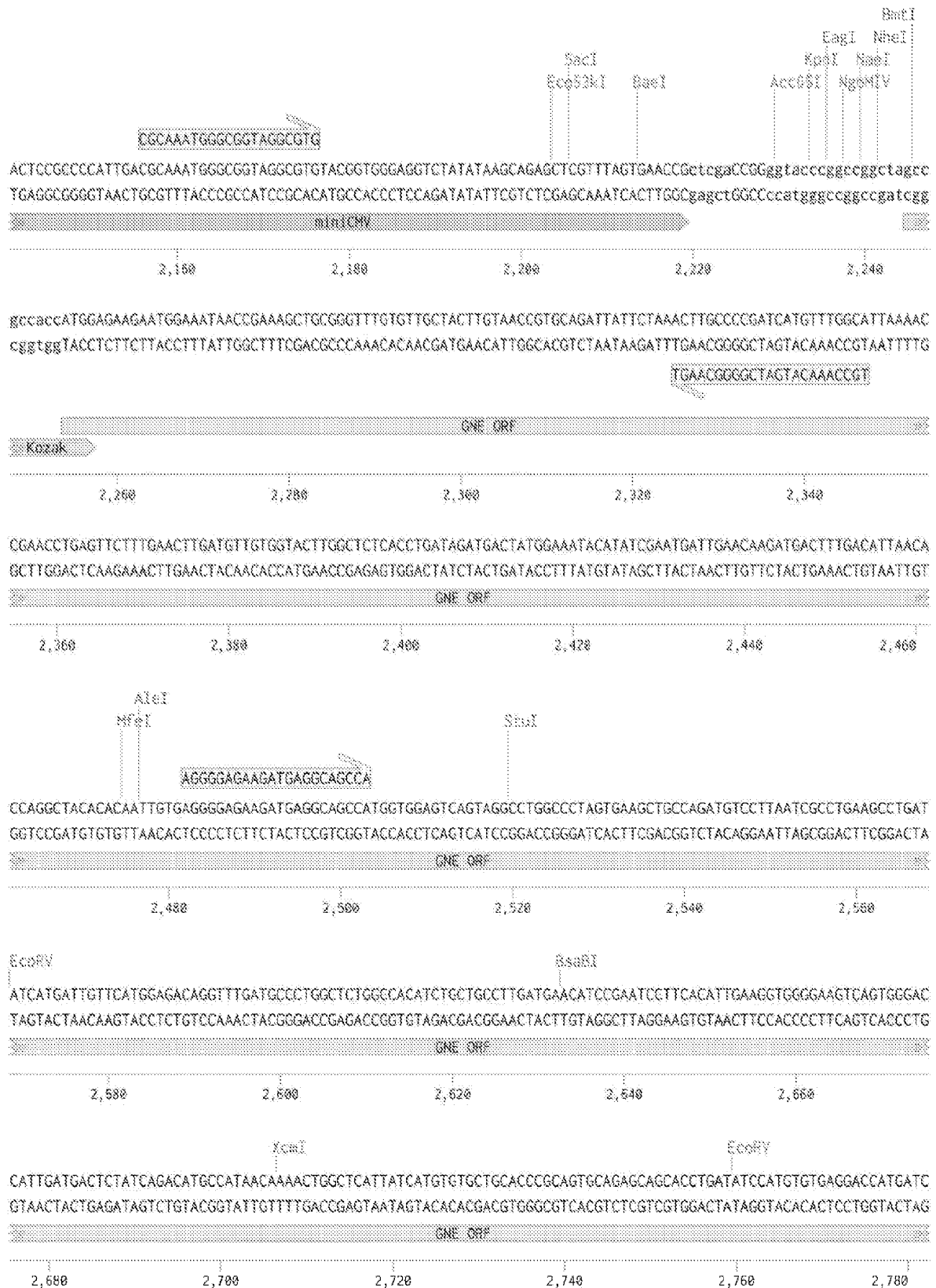
ptrs-miniCMV-GNE KanR (6594 bp)





BsaAI
 ACGCCAGAATCCTGAGAAGTG
 CGAGCACGTATAACGTGCTTTCCCTGGTATAGATCAGAGCGGAGCTAAACAGGAGGCCBATTAAAGGGATTTTACACAGGAACGGTACGCCAGAATCCTGAGAAGTG
 GCTCGTGCAATTTGCACGAAAGGAGCAATCTTAGTCTCGCCCTCGATTGTCCTCGCGCTAATTTCCCTAAATCTGTCTTGCCATGCGGTCTTAGGACTCTTCAC
 1,500 1,520 1,540 1,560 1,580 1,600
 TTTTATAATCAGTGAGGCCACCGAGTAAAGAGTCTGTCCATCACGCAATTAACCGTTGTGCAATACTTCTTTGATTAGTAATAACATCACTTGCCTGAGTAGA
 AAAAAATATTAGTCACTCCGGTGGCTCATTTTCTCAGACAGGTAGTGGCTTTAATTGGCAACAGCGTTATGAAGAACTAATCATTATTGTAGTGAACGGACTCATCT
 1,620 1,640 1,660 1,680 1,700
 AGAACTCAAATATCGGCTTGCTGGTAAATATCCAGAACAAATATTACCGCCAGCCATTGCAACGGAATCGCCATTGCCATTACGGCTGCGCAACTGTTGGGAAGGG
 TCTTGAGTTTGATAGCCGGAACGACCATTATAGGTCCTGTTATAATGGCGGTCGGTAAGGTTGCCTTAGCGGTAAGCGGTAACTCCGACGCGTTGACAACCTTCCC
 1,720 1,740 1,760 1,780 1,800
 ScaI FspI
 LacZ alpha
 1,820 1,840 1,860 1,880 1,900
 PvuII AhdI
 CGATCGGTGCGGGCTCTTCGCTATTACGCCAGCTGCGCGCTCGCTCGCTCACTGAGGCCGccCGggCAAAGccCGggCGtCGggCGacCTTTGgtCGccCGGCCCTC
 GETAGCCACGCGCCGGAGAAGCGATAATGCGGTGACGCGCGGAGCGAGCGAGTGACTCCGGCGGCGccGTTTCggGCGccGCaGCGCGtGgAAACCaGCGggCGCGAG
 1,920 1,940 1,960 1,980 2,000 2,020
 LacZ alpha WT ITR
 HindIII
 AvrII
 ACATAACTTACGGTAAATGGCC
 AGTGAGCGAGCGAGCGCGCAGagaggagggtggccaaactccatcactaggggttcttAGGaagccttTCGTTACATAACTTACGGTAAATGCGCGGCTGGCTGACCGC
 TCACTCGCTCGCTCGCGGTCTctccctcaccgggttgaggtagtgaatccccaaggaTCCttcgaaAGCAATGTATTGAATGCCATTTACCGGCGGAGCGACTGGCG
 2,040 2,060 2,080 2,100 2,120 2,140
 WT ITR minICHV
 CCAACGACCCCGGACTCAGCGGGATTTCCAAGTCTCCACCCCATTCACGTCAATGGGAGTTTGTGTTTGGCACCAAAATCAACGGGACTTTCCAAAATGTCTGAACA
 GGTTGCTGGGGGCTGAGTGCCCTAAAGGTTCAAGAGGTGGGGTAACGTGCAGTTACCTTCAAAACAAACCGTGGTTTGTAGTTGCGCTGAAAAGTTTACAGCATTGT
 AGGTTCAAGAGGTGGGGTAACGT
 minICHV

Figure 16D



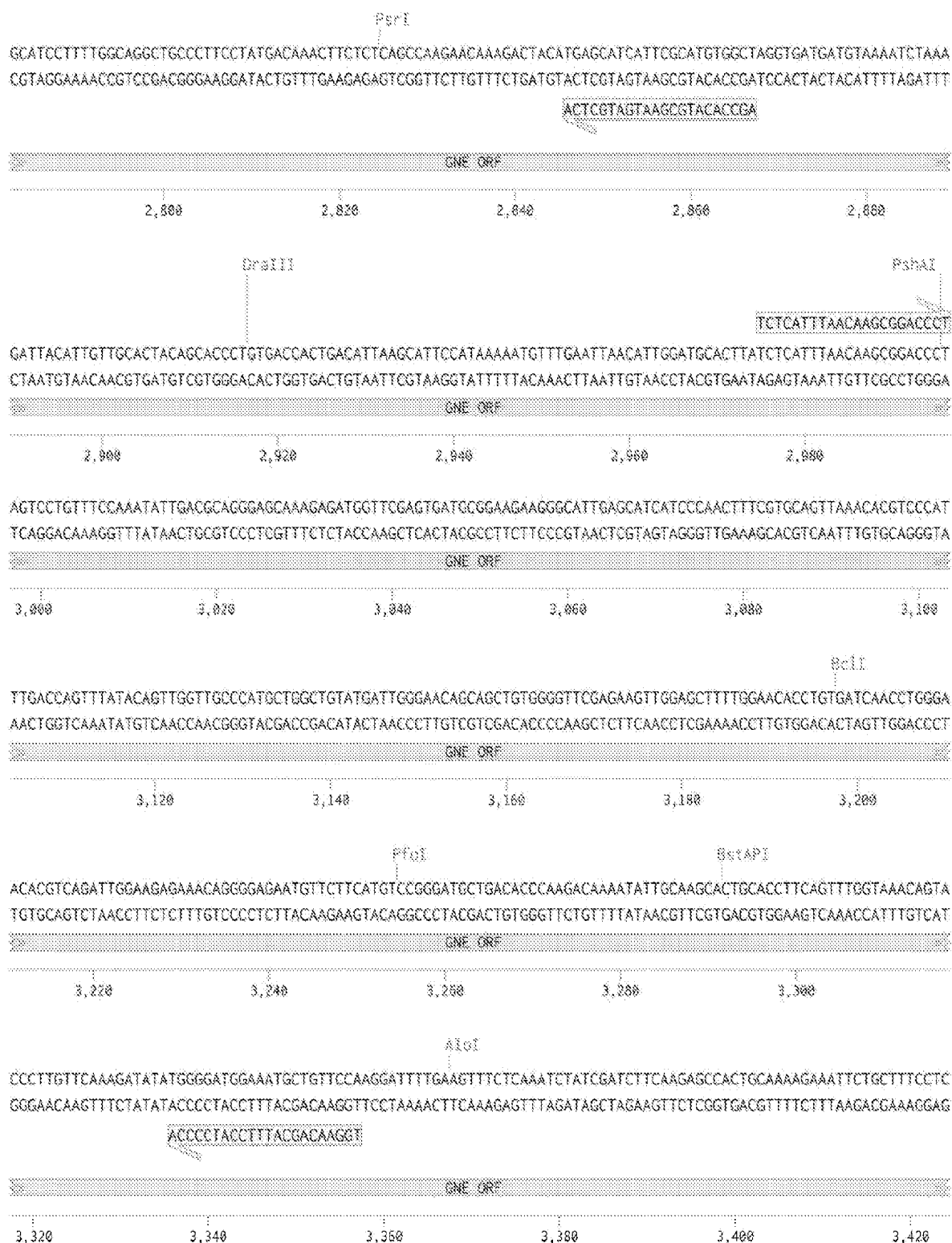


Figure 16F

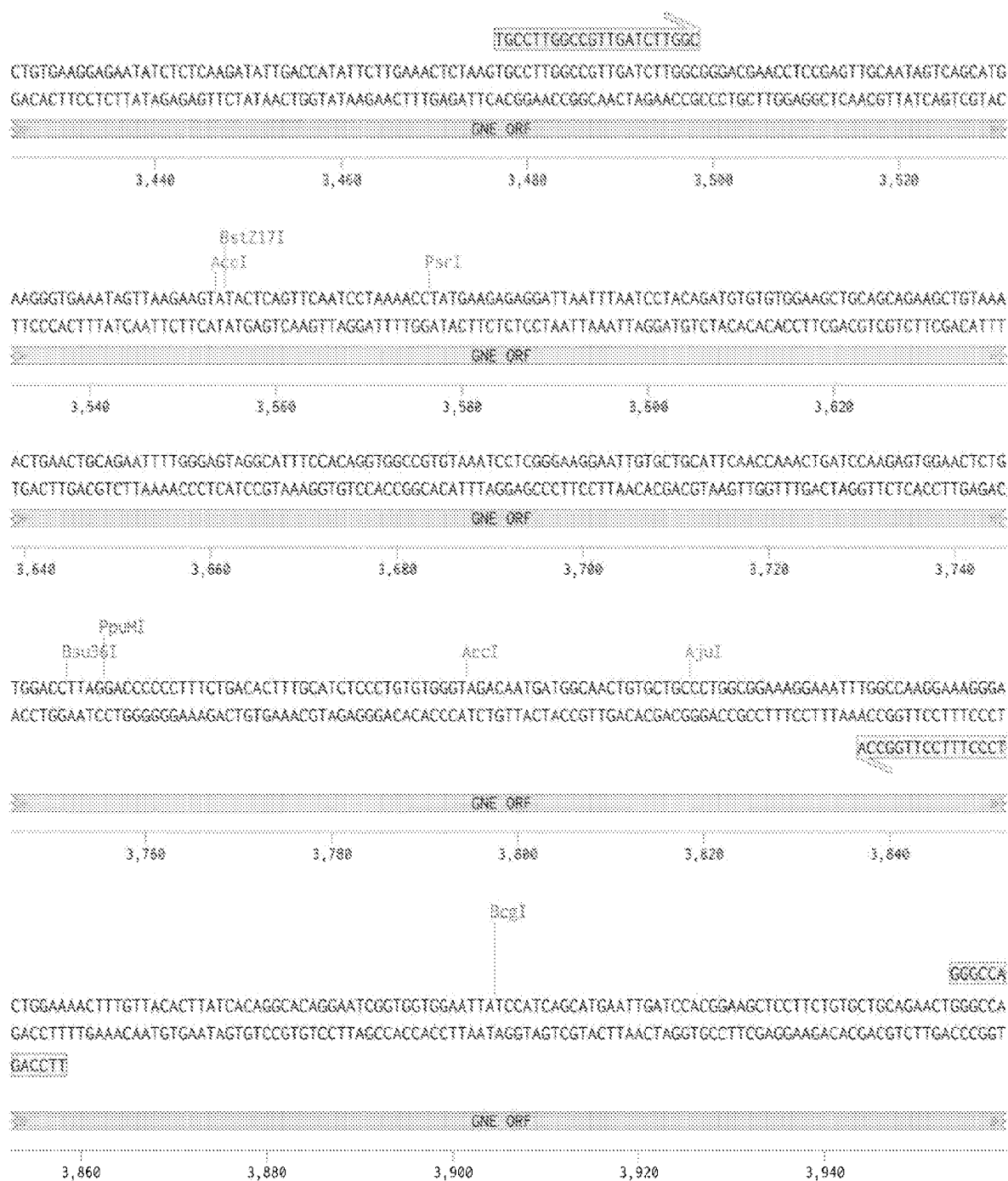


Figure 16G

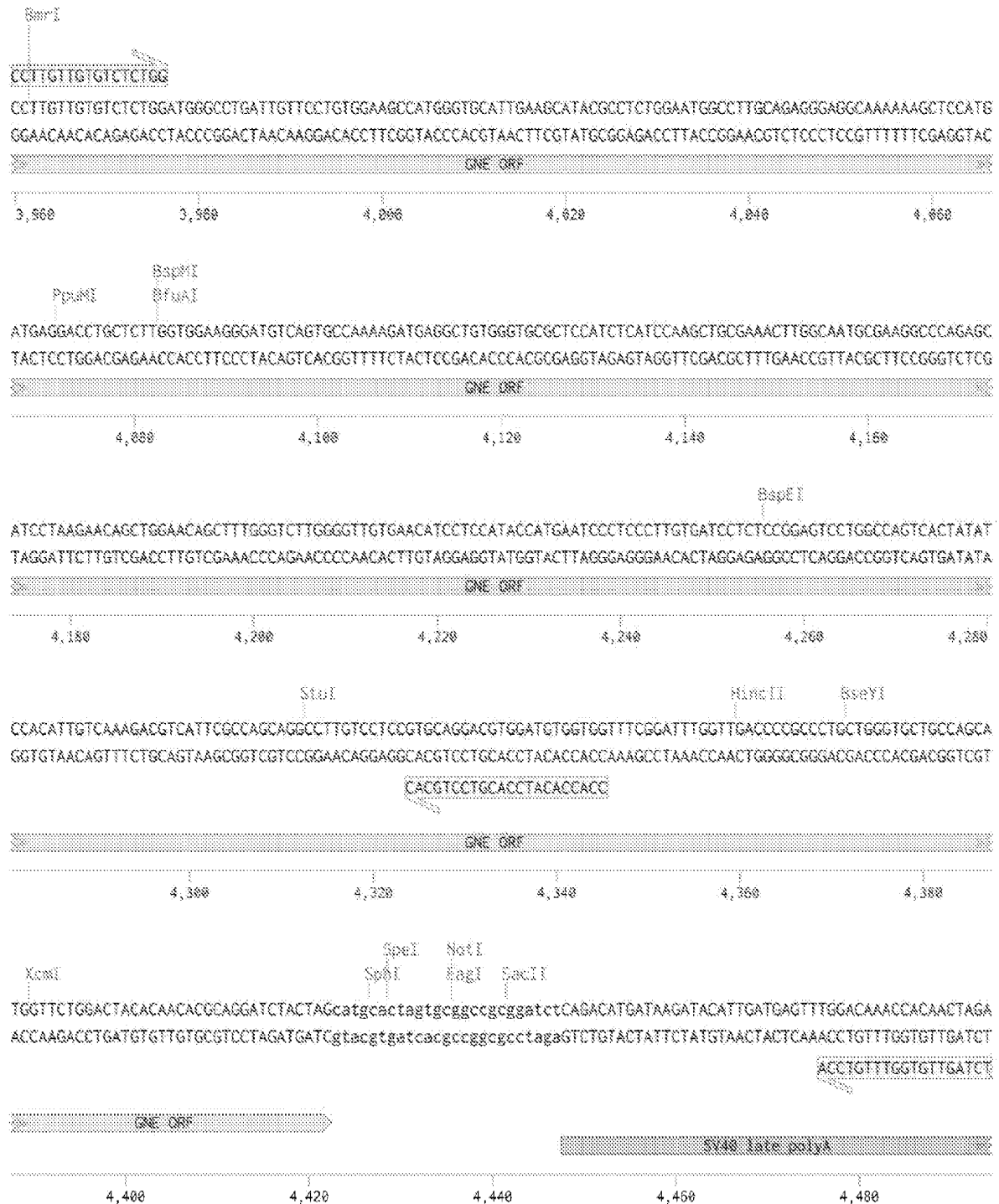
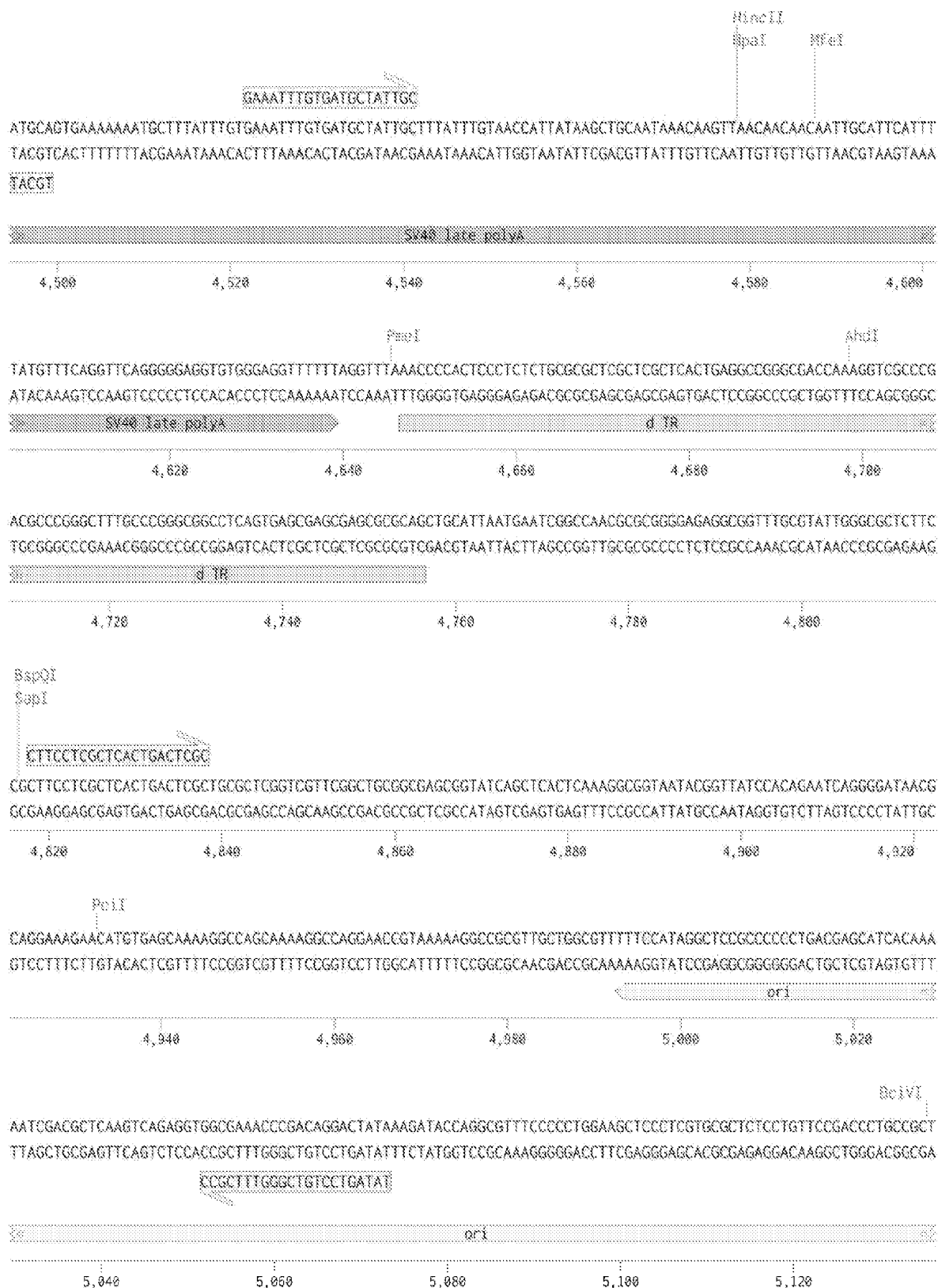


Figure 16H



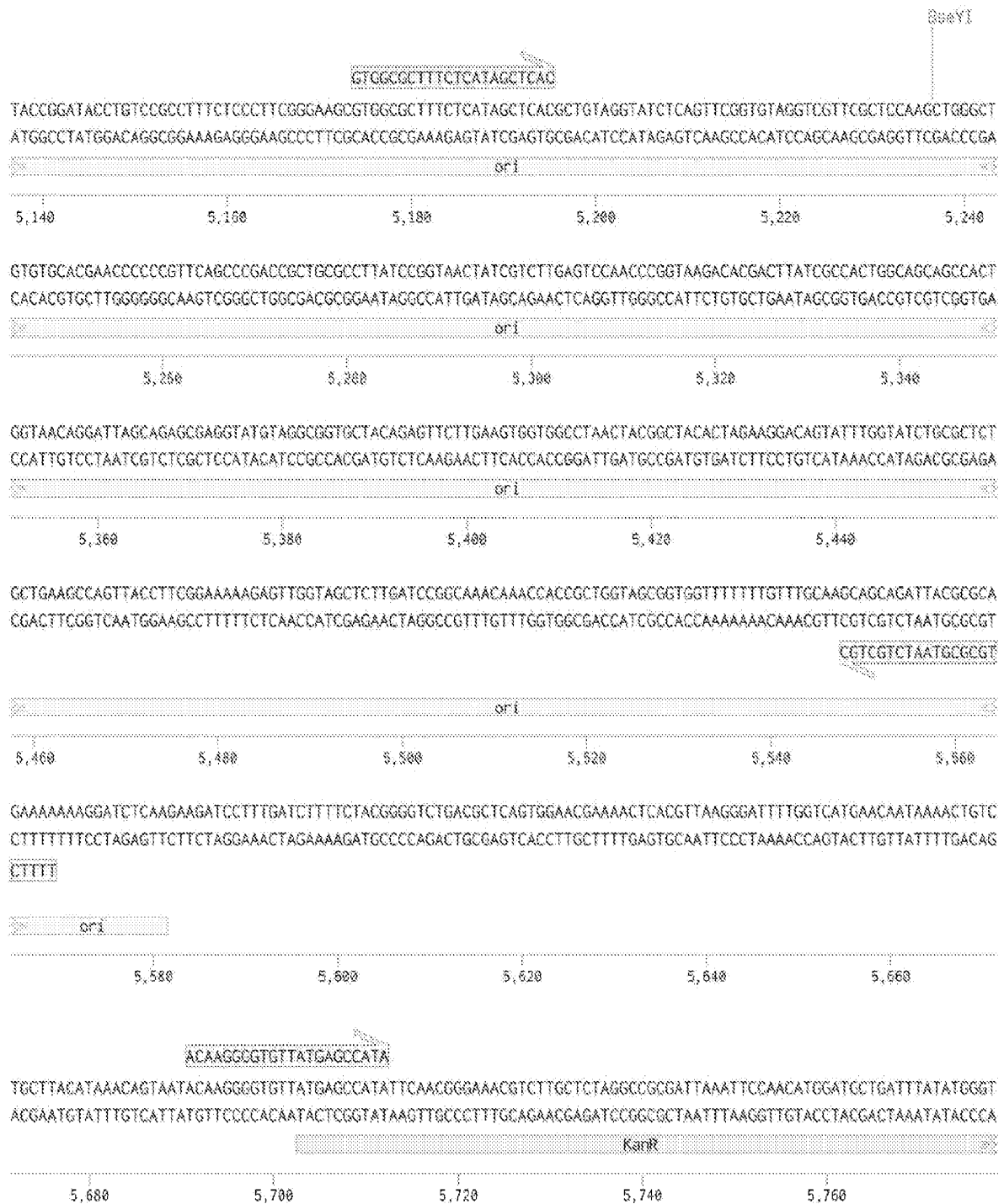


Figure 16J

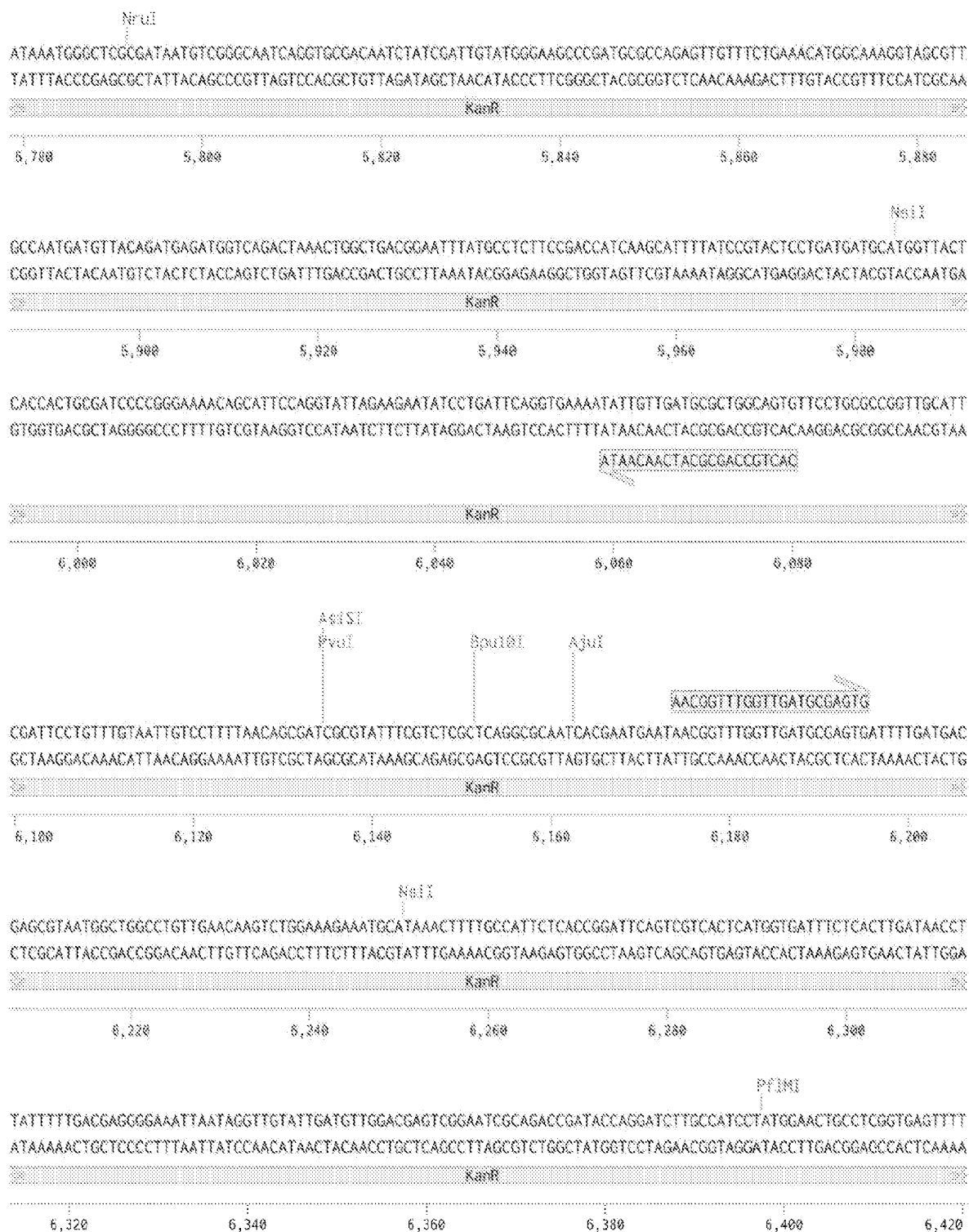
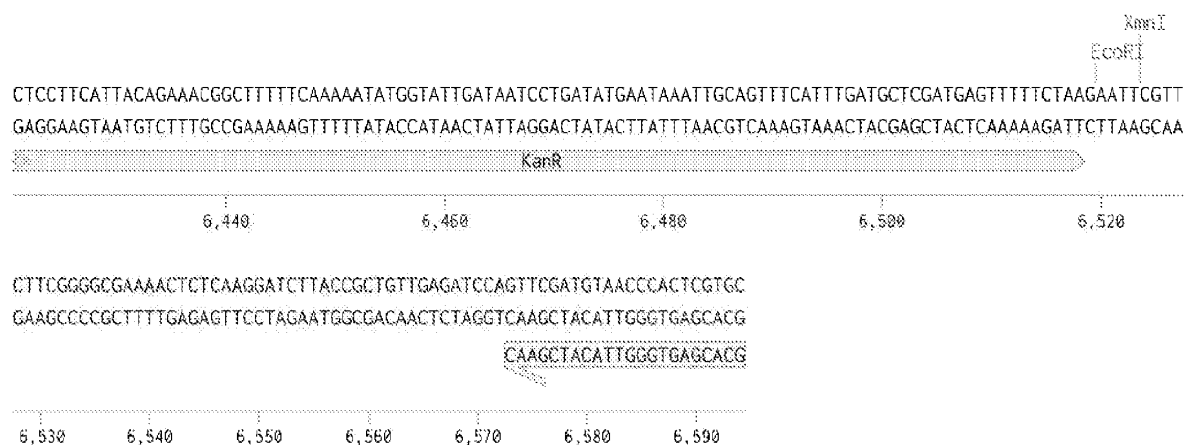
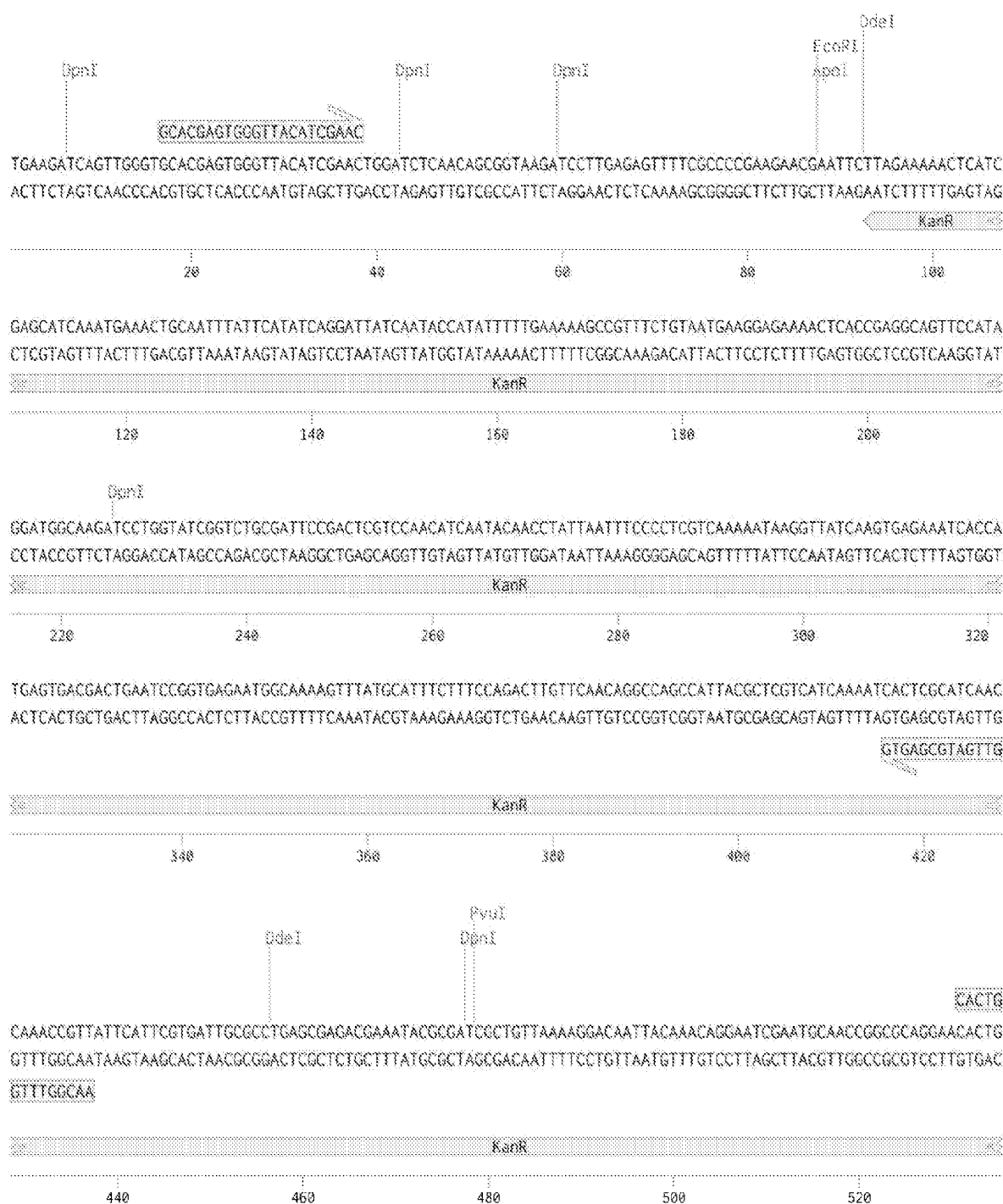
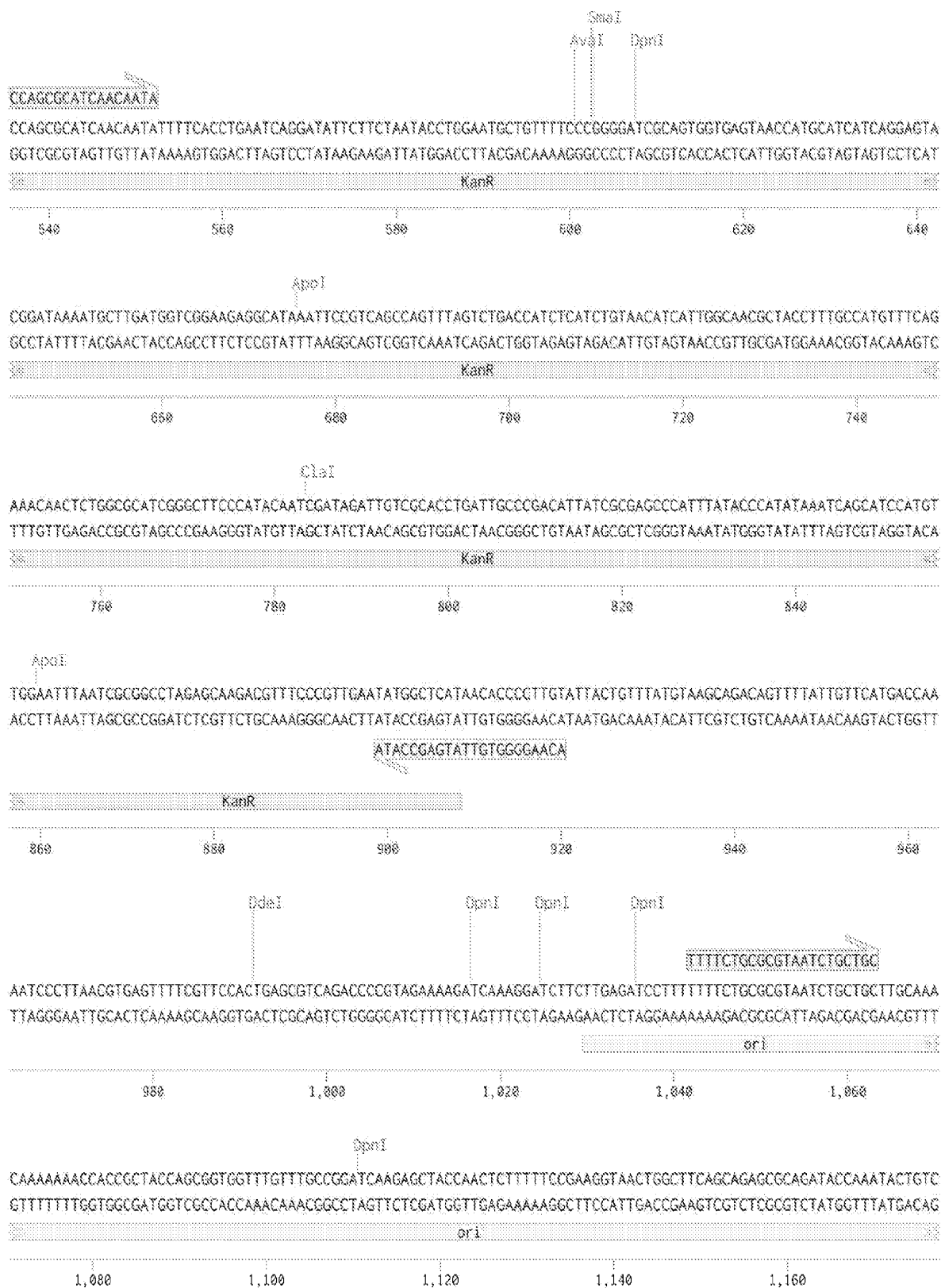


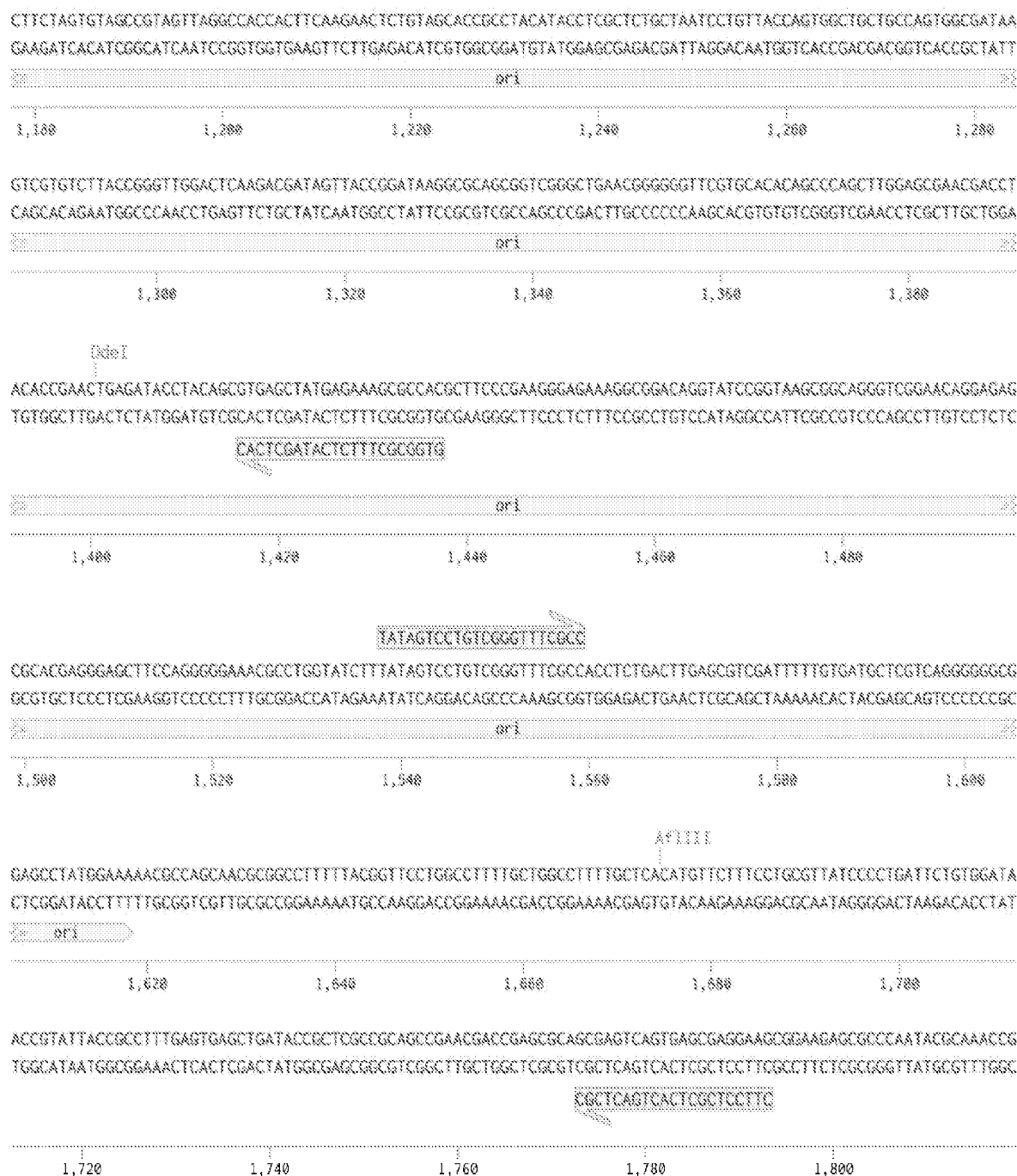
Figure 16K

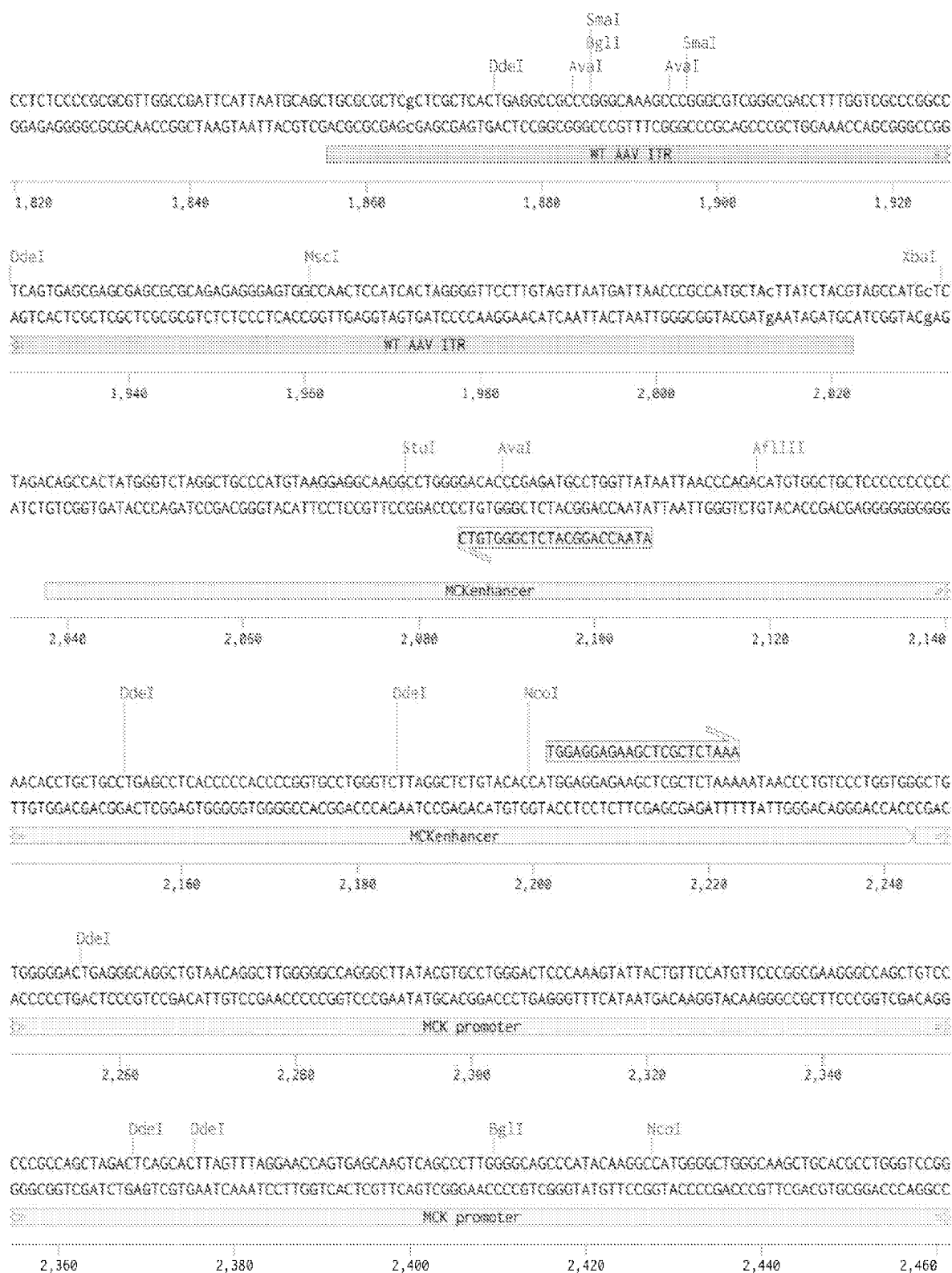


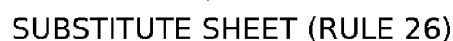
pAAV.MCK.NEWhGALGT2.FL-FGF1 IRES.FST344 KanR (7...

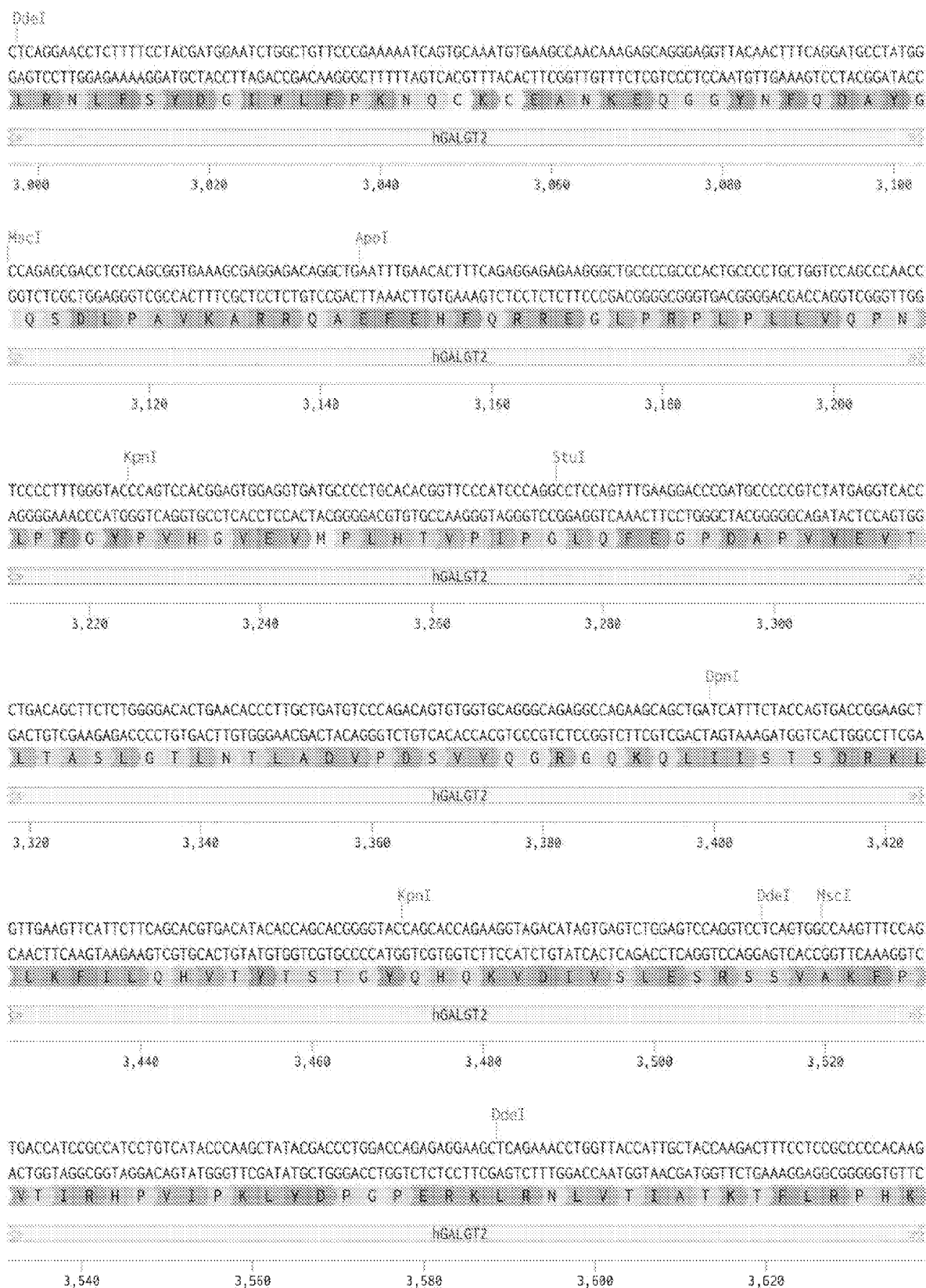












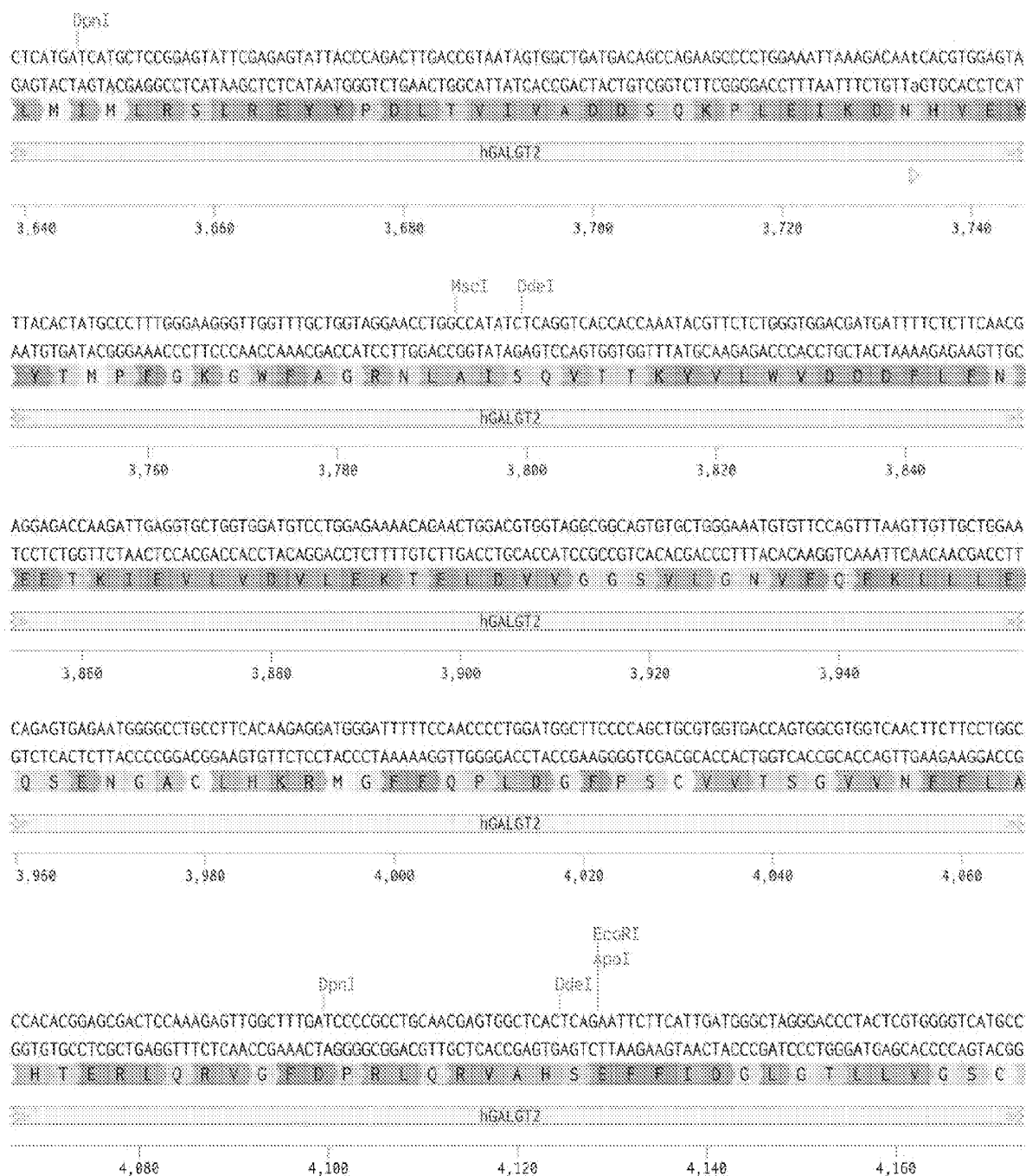


Figure 17H

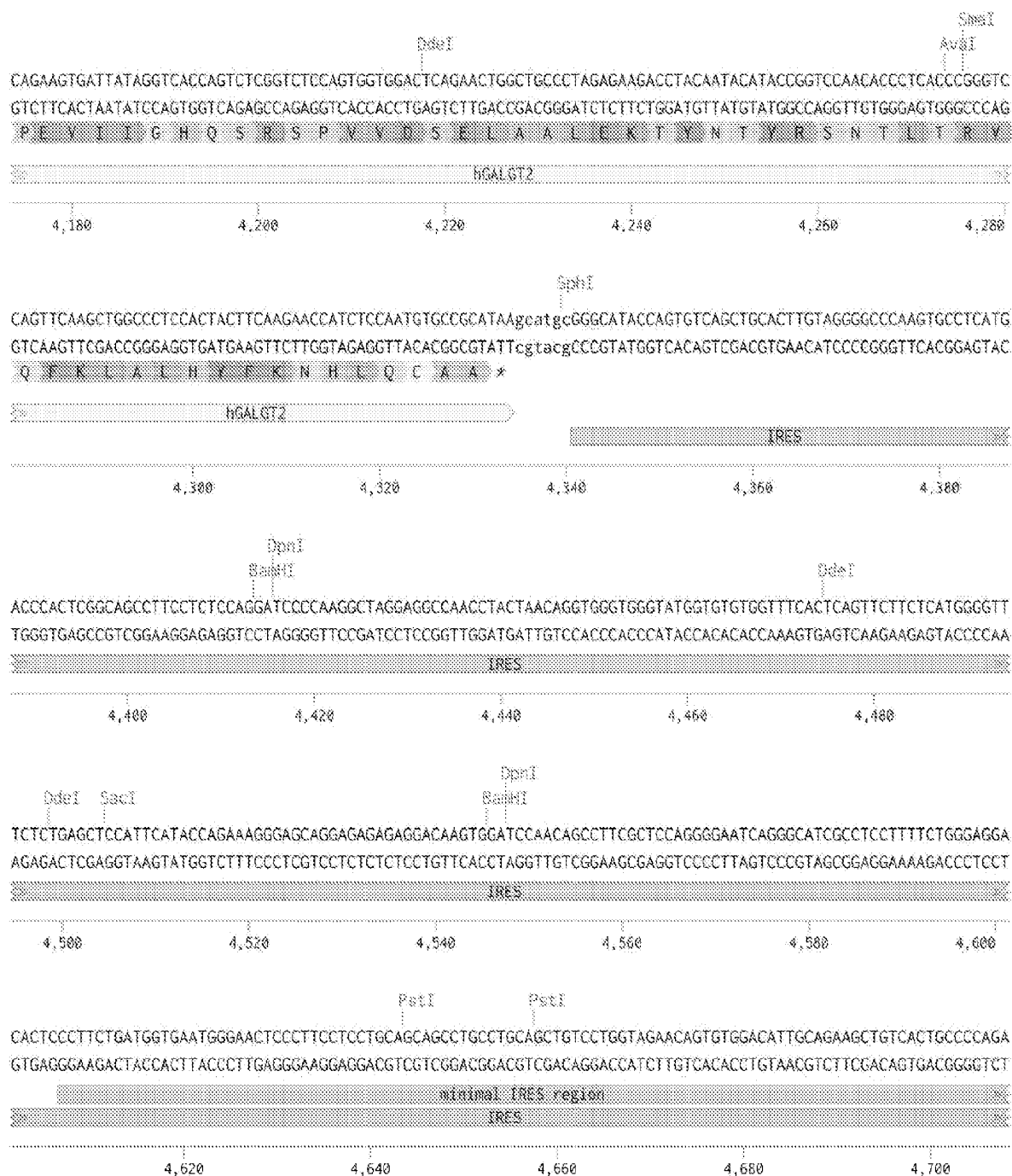
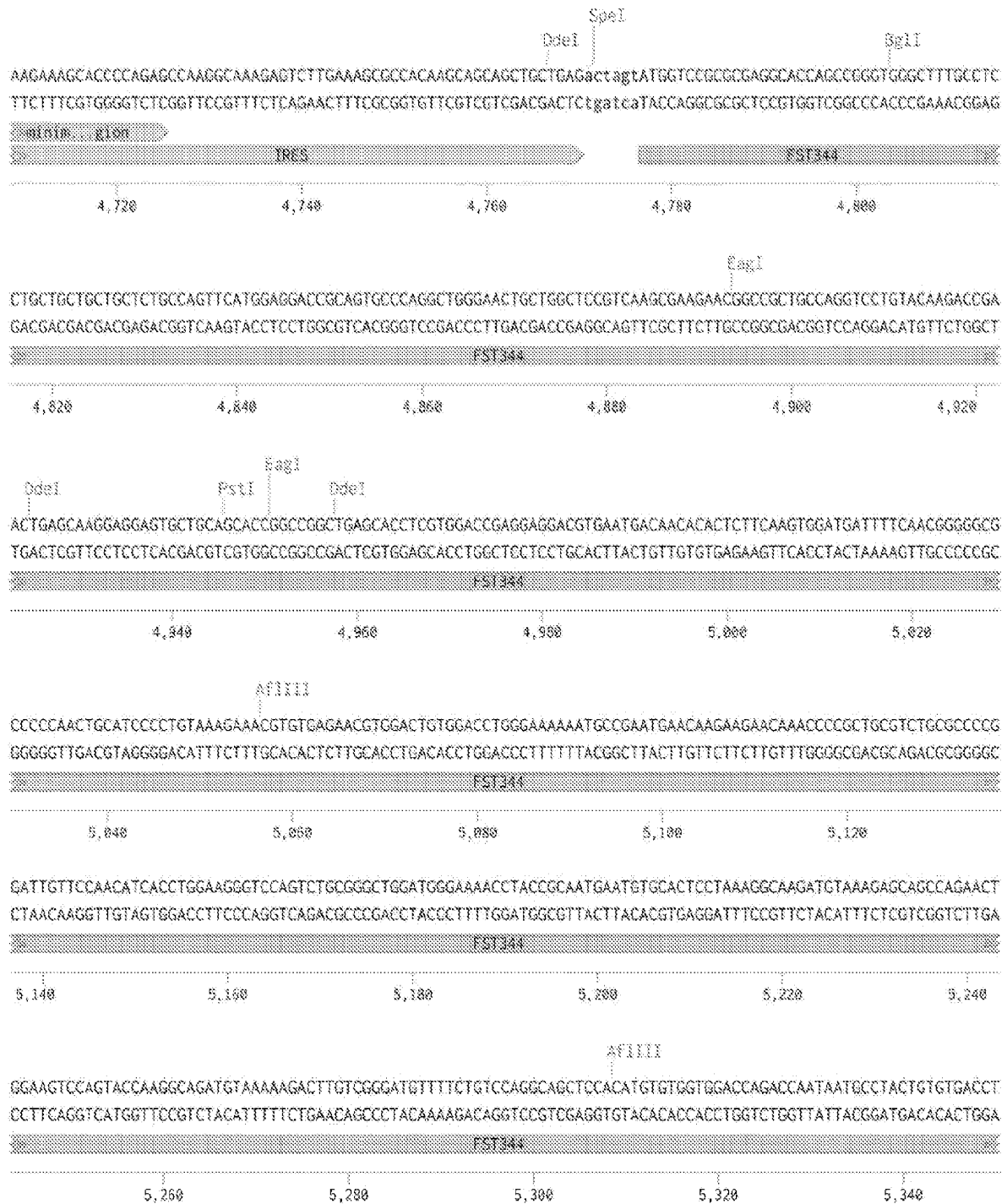


Figure 171



GGAATCGGATTTGCCAGAGCCTGCTTCTCTGAGCAATATCTCTGTGGGAATGATGGAGTCACCTACTCCAGTGCCTGCCACCTGACAAAGGCTACCTGCCTGCTG
 CATTAGCCTAAACGGGTCTCGGACGAAGGAGACTCGTTATAGAGACACCCTTACTACCTCAGTGGATCAGGTCACGACGGTGGACTCTTTCCGATGGACGGACGAC
 FST344
 5,360 5,380 5,400 5,420 5,440
 DpnI BglII EcoRV
 GGCAGATCTATTGGATTAGCCTATGAGGAAAGTGATCAAAGCAAAGTCCTGTGAAGATATCCAGTGCAGTGGTGGGAAAAATGTTTATGGGATTTCAAGGTTGG
 CCGTCTAGATAACCTAATCGGATACTCCCTTTCACATAGTTTCGTTTCAGGACACTTCTATAGGTCACGTGACCACCCCTTTTACAAATACCCCTAAAGTTCCAACC
 FST344
 5,460 5,480 5,500 5,520 5,540 5,560
 GAGAGGCCGGTGTTCCTCTGTGATGAGCTGTGCCCTGACAGTAAGTCGGATGAGCCTETCTGTGCCAGTGACAATGCCACTTATGCCAGCGAGTGTCCATGAAGG
 CTCTCCGGCCACAAGGGAGACACTACTCGACACGGGACTGTCAATTCAGCCTACTCGGACAGACACGGTCACGTGTTACGGTGAATACGGTGCCTCACACGGTACTTCC
 FST344
 5,580 5,600 5,620 5,640 5,660
 DpnI DpnI
 AAGCTGCCCTGCTCCTCAGGTGTGCTACTCGAAGTAAAGCACTCCCGATCTTCCAACTCCATTTCCGAAGACACCCGAGGAAGAGGAGGAAGATGAAGACCAGGACTAC
 TTCGACGGACGAGGAGTCCACACGATGACCTTCATTTCTGTAGGCTAGAACGTTGAGGTAAGCCCTCTGTGGCTCCTTCTCCTCCTTCTACTTCTGTGCTCTGATG
 FST344
 5,680 5,700 5,720 5,740 5,760
 NheI NotI DpnI DpnI NheI
 AGCTTTCTATATCTTCTATTCTAGAGTGGTaaagcgccgcAATAAAAGATCTTTATTTTCATTAGATCTGTGTGTTGGTTTTTGTGTGTCTAGAGCATGGCTACG
 TCGAAAGGATATAGAAGATAAGATCTCACCTatgcgcggcgTTATTTTCTACAAATAAAAGTAATCTAGACACACAACCAAAAAACACACAGATCTcGTACCGATGC
 FST344 polyA
 5,780 5,800 5,820 5,840 5,860 5,880
 NheI NheI
 TAGATAAGTAGCATGGCGGGTTAATCATTAACTACAAGGAACCCCTAGTGTGGAGTTGGCACTCCCTCTCTGCGCGCTCGCTCGCTCAGTGAAGCCCGGCGACCA
 ATCTATTTCATCGTACCGCCCAATTAGTAATTGATGTTCTTGGGGATCACTACCTCAACCGGTGAGGGAGAGACCGCGGAGCGAGCGAGTGAAGTCTCCGCGCCGCTGGT
 WT AAV ITR
 5,900 5,920 5,940 5,960 5,980

Figure 17K

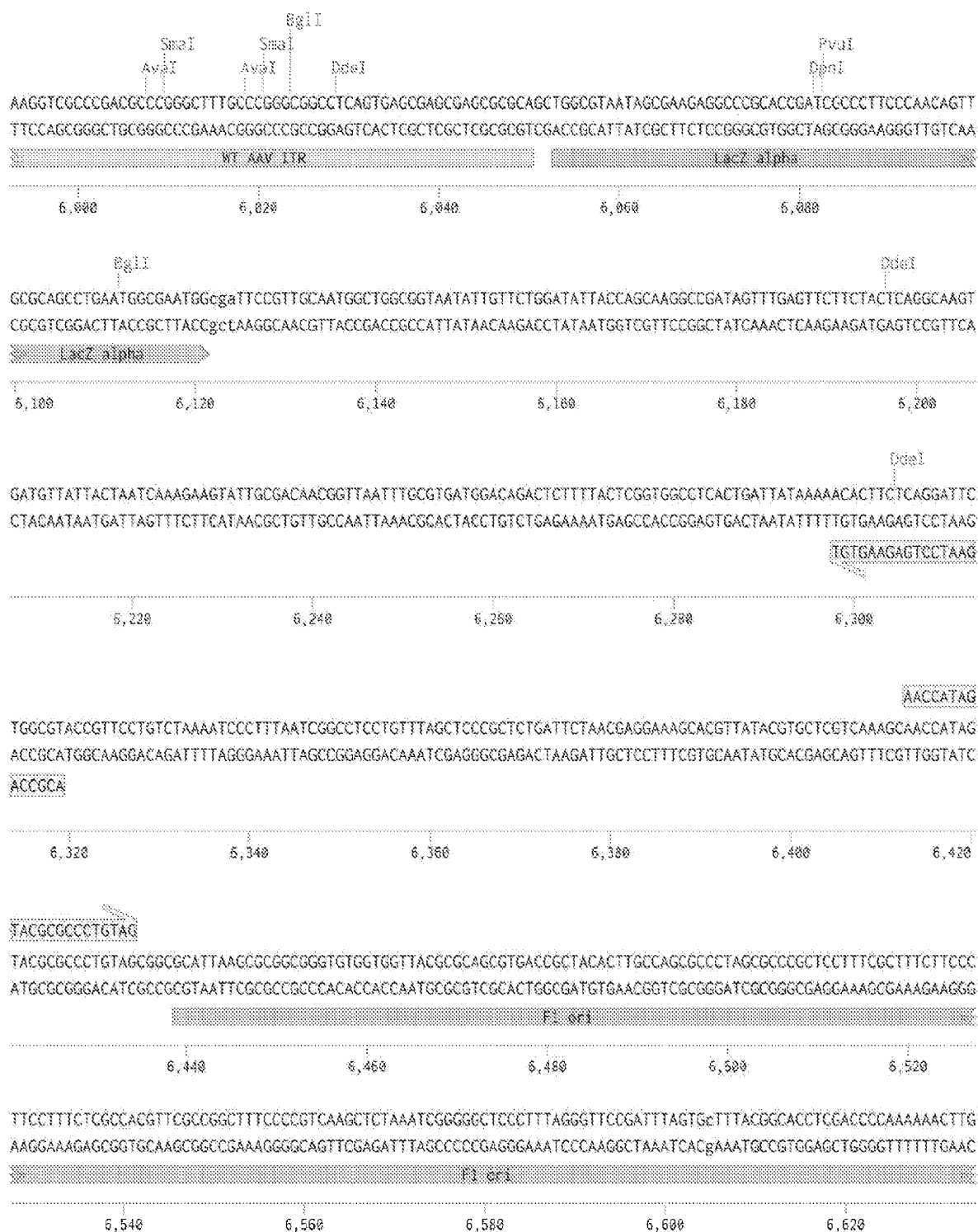


Figure 1/L

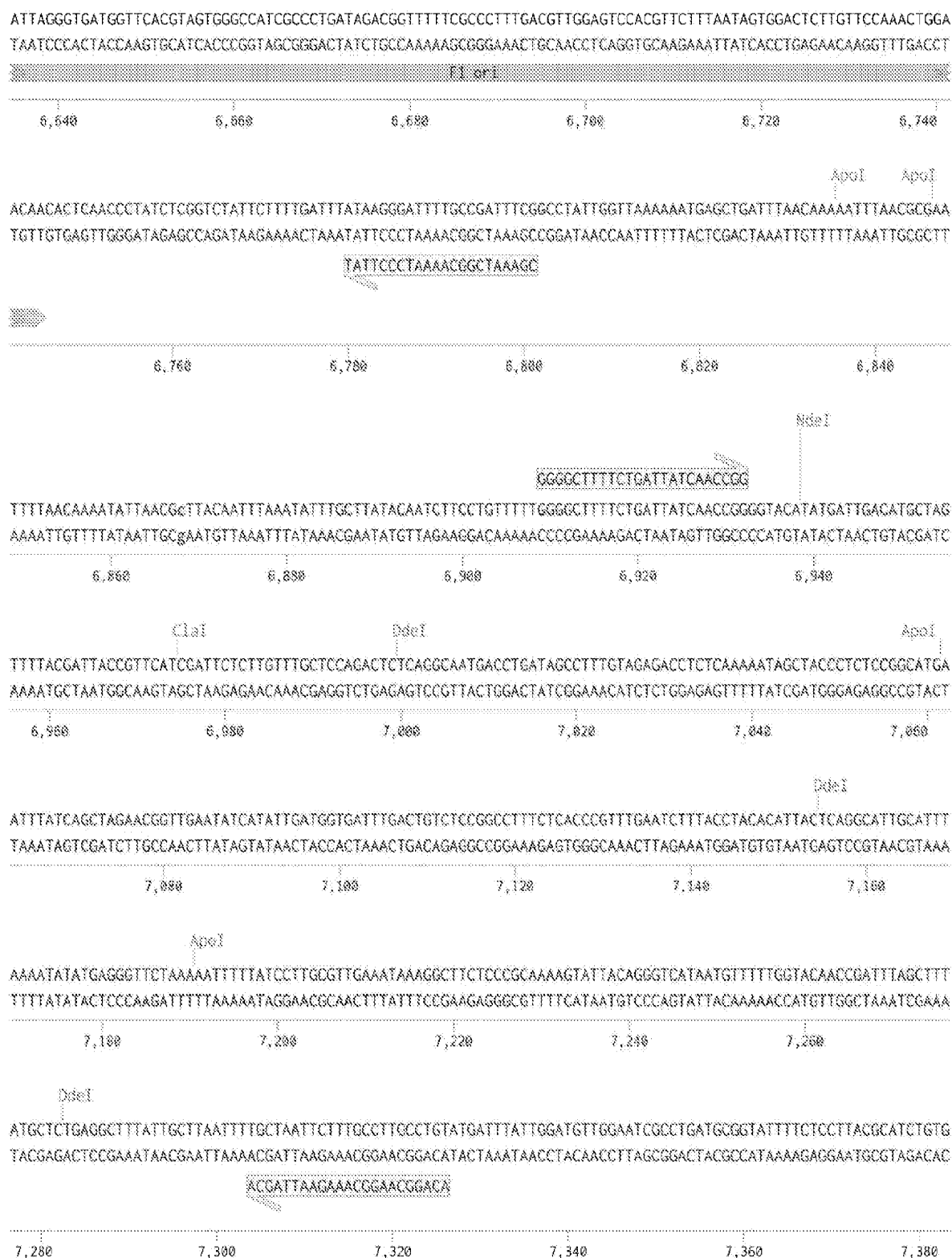


Figure 17M

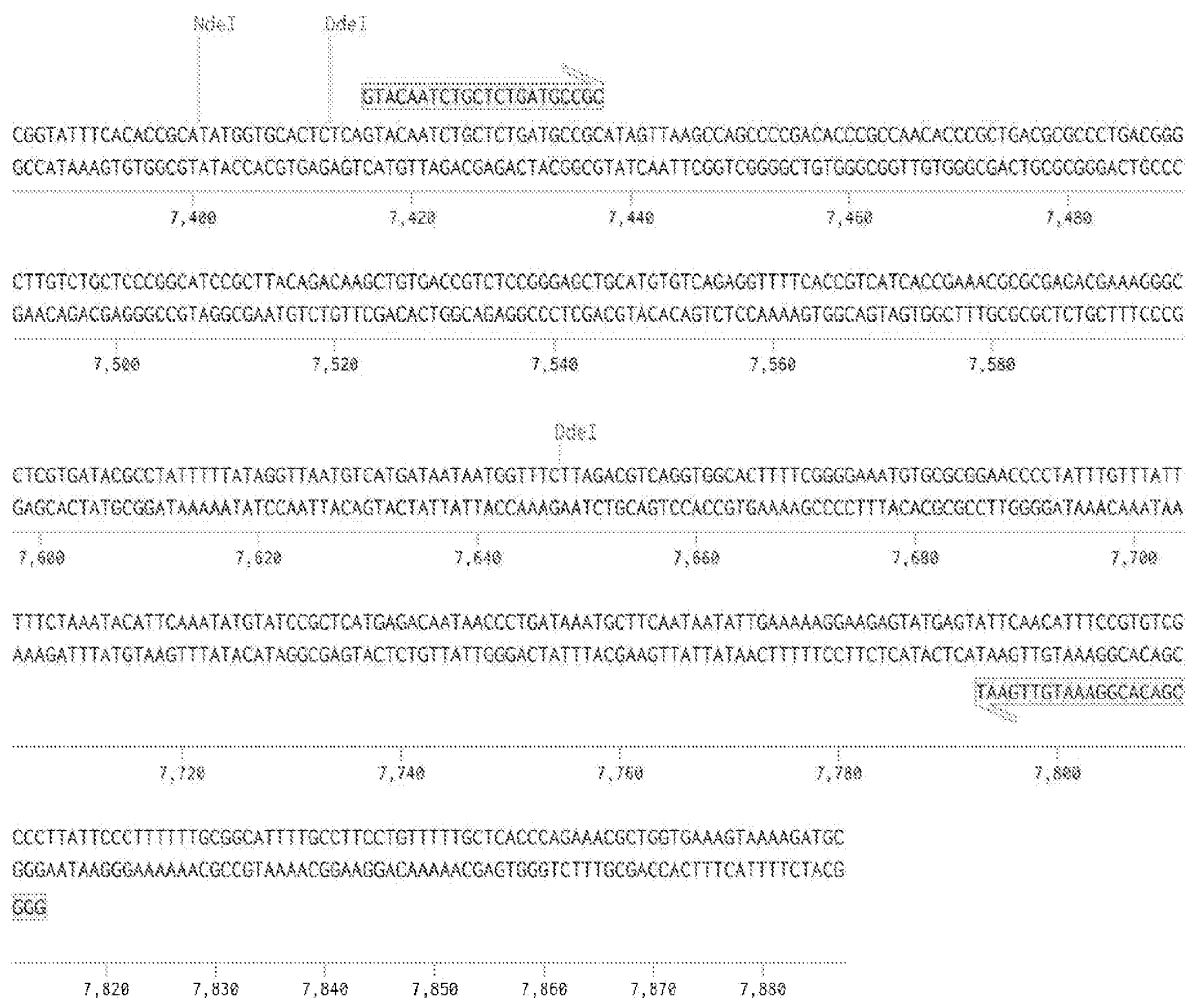


Figure 18

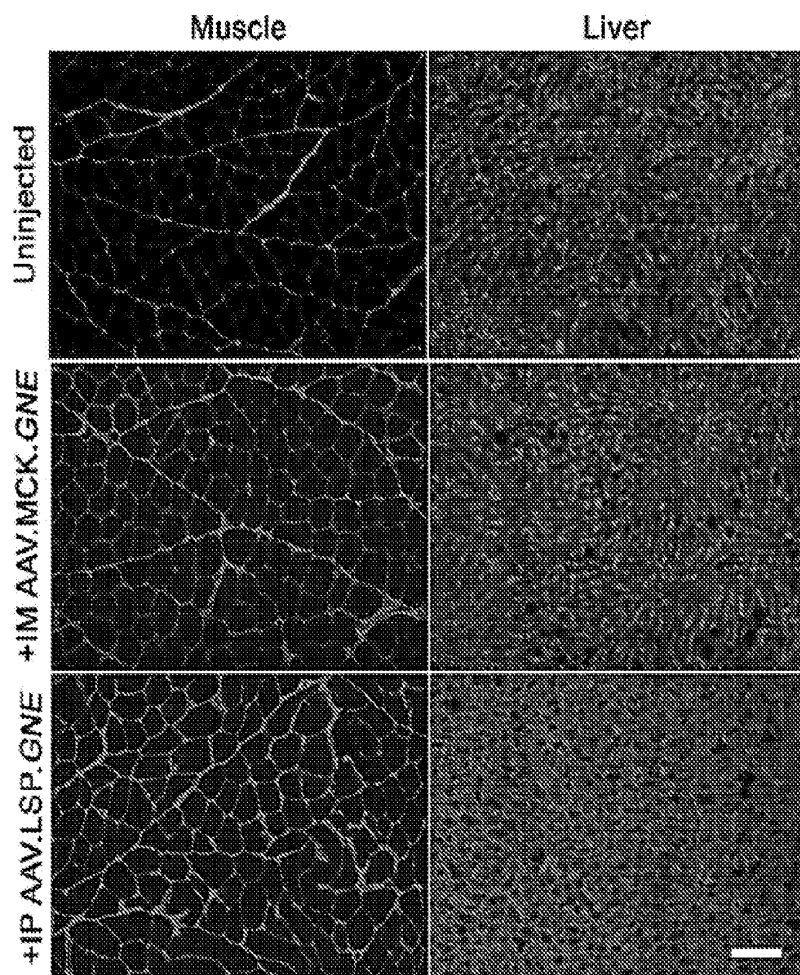


Figure 19

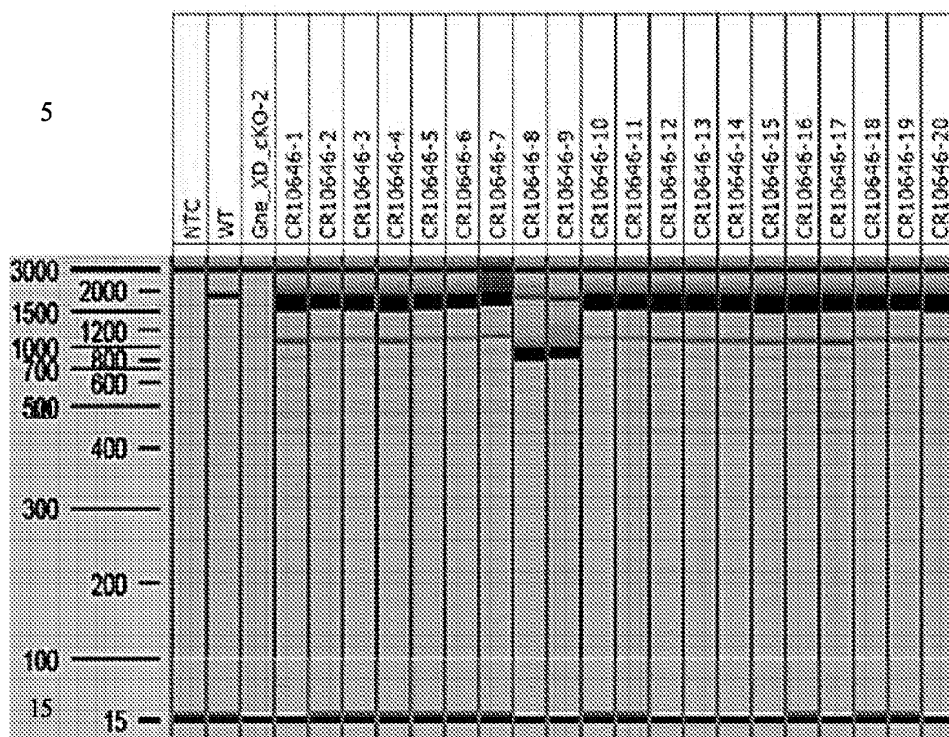


Figure 20

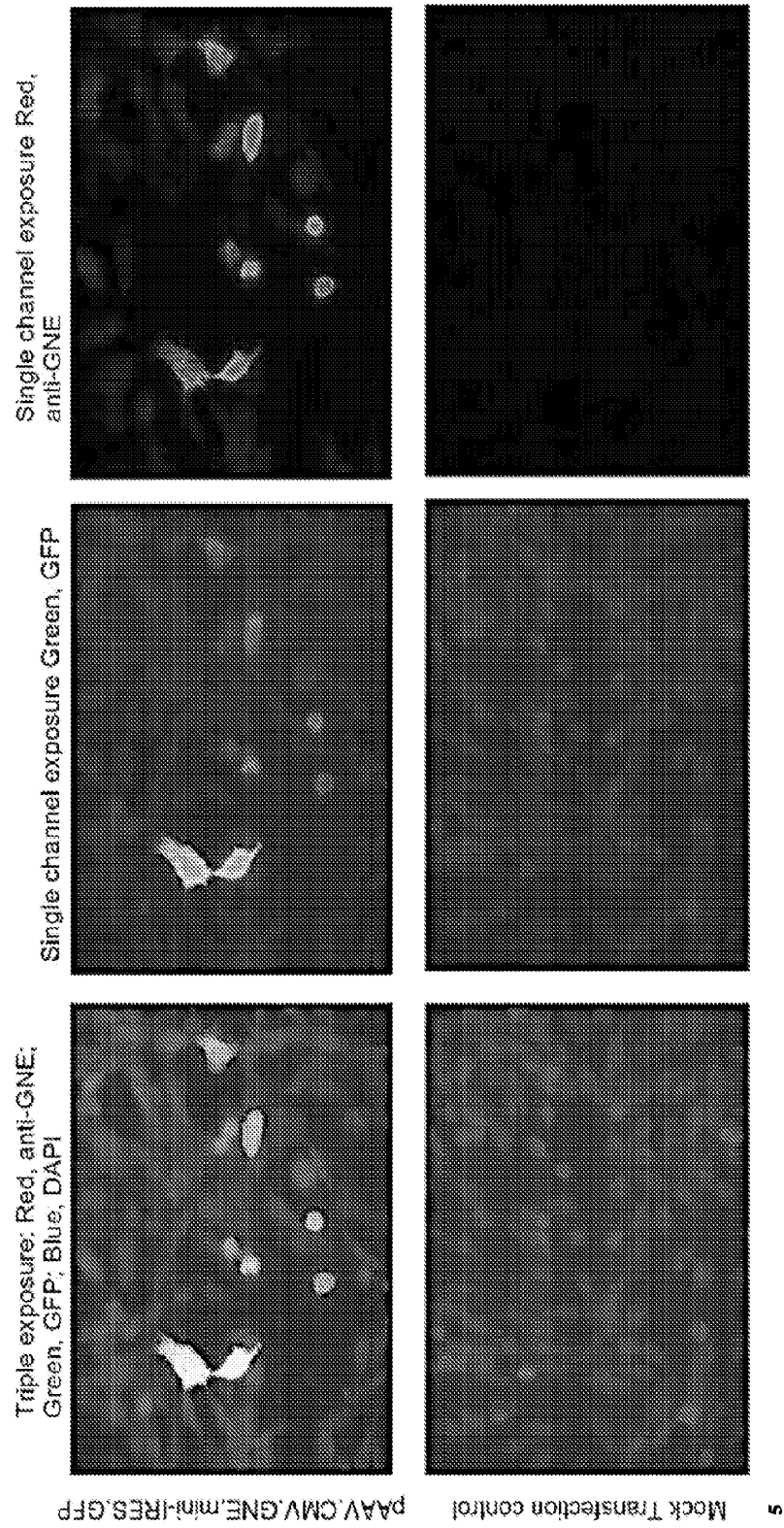


Figure 21

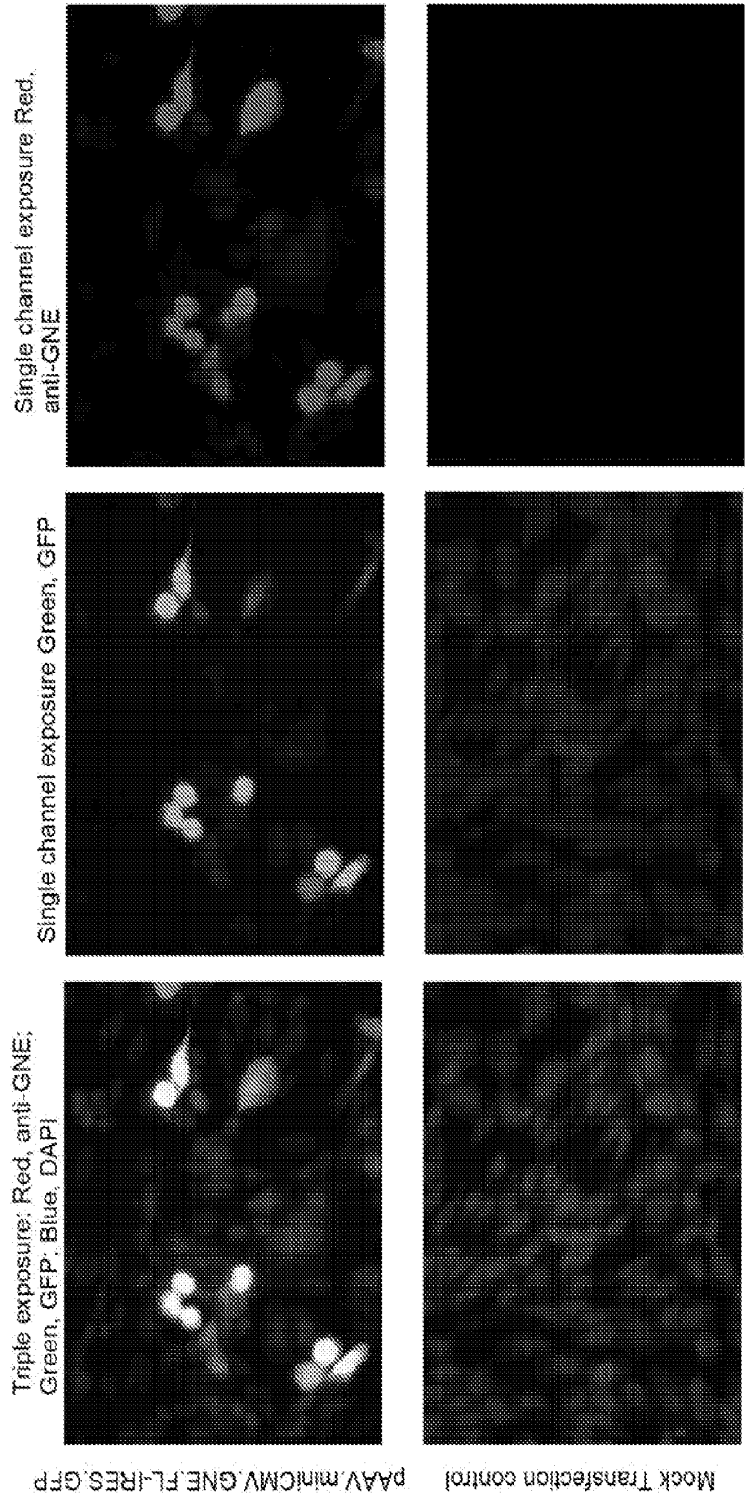


Figure 22

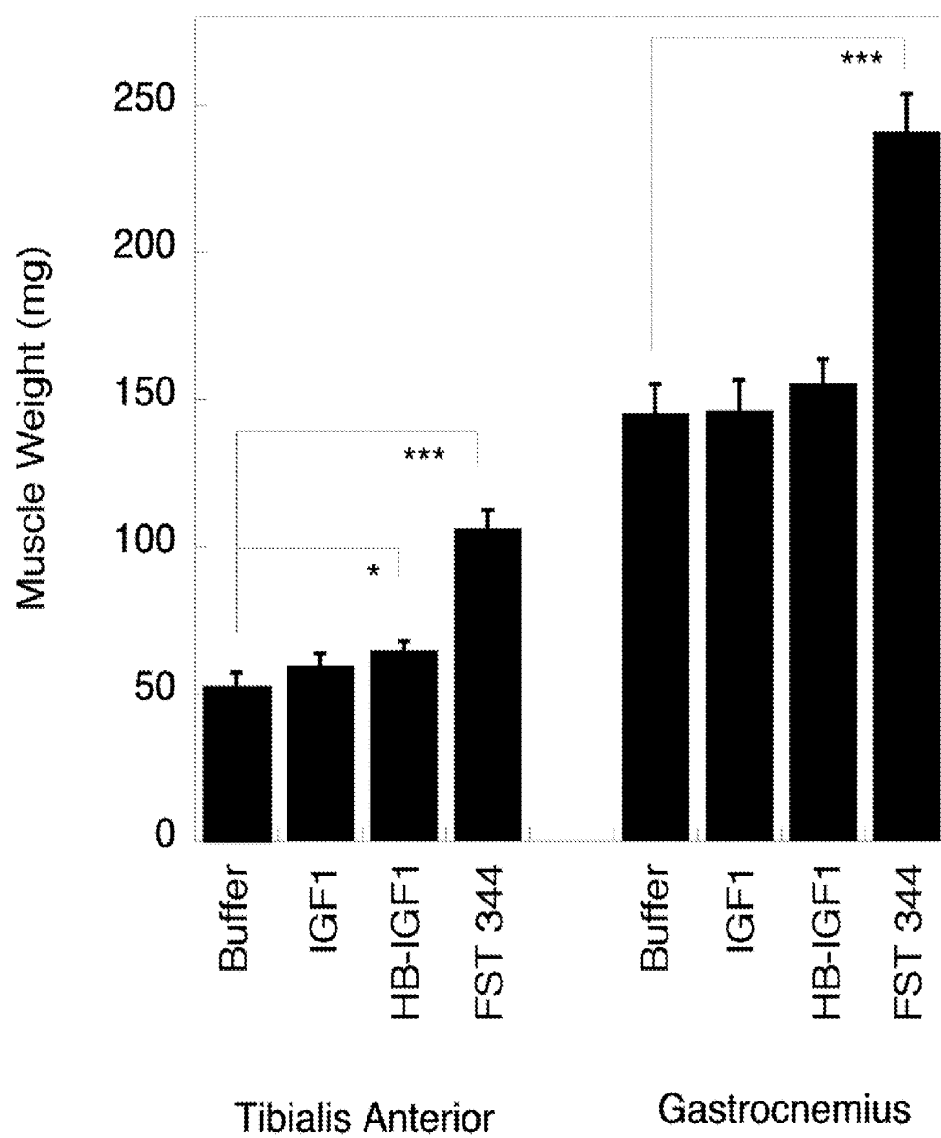


Figure 23

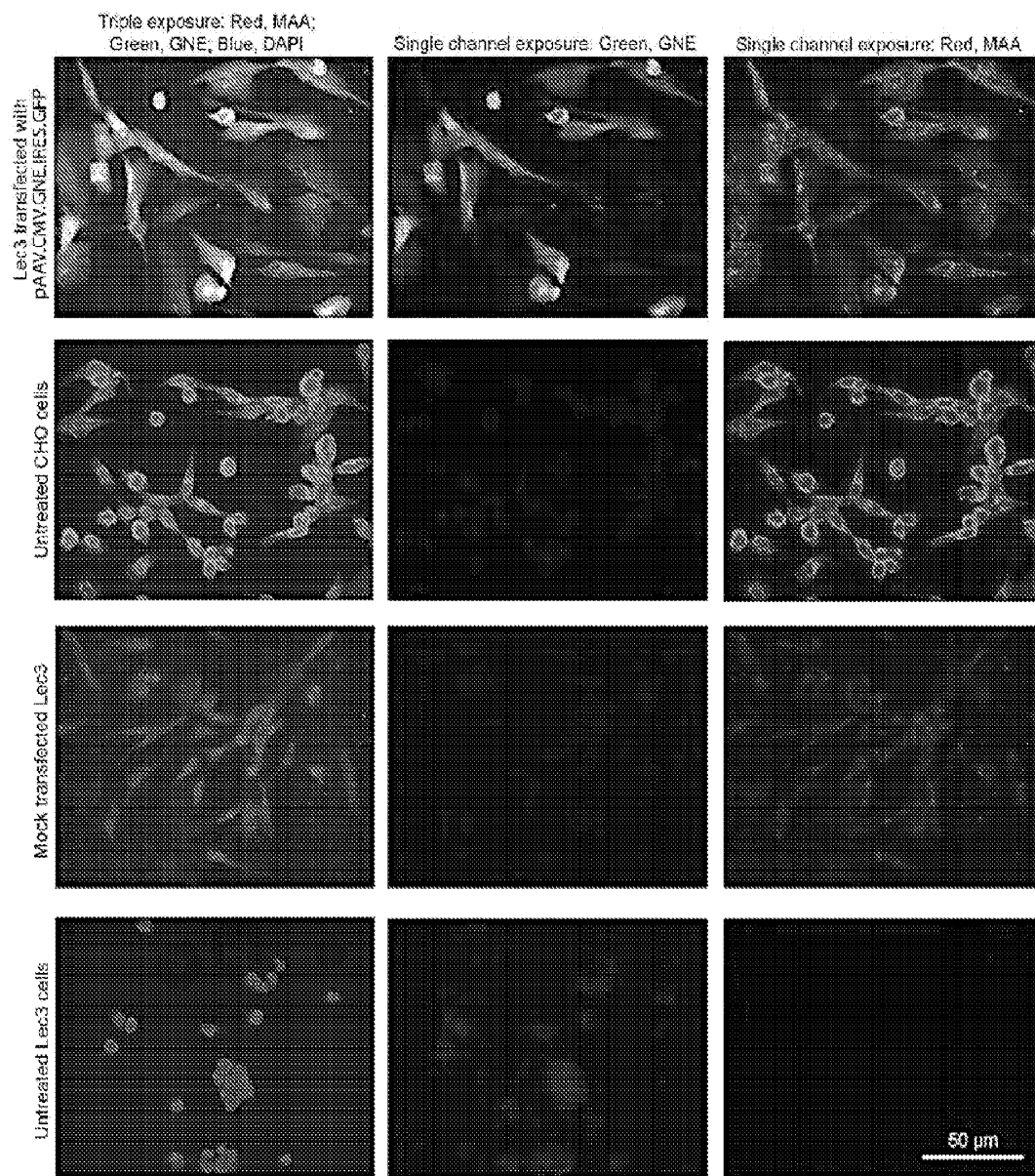


Figure 24

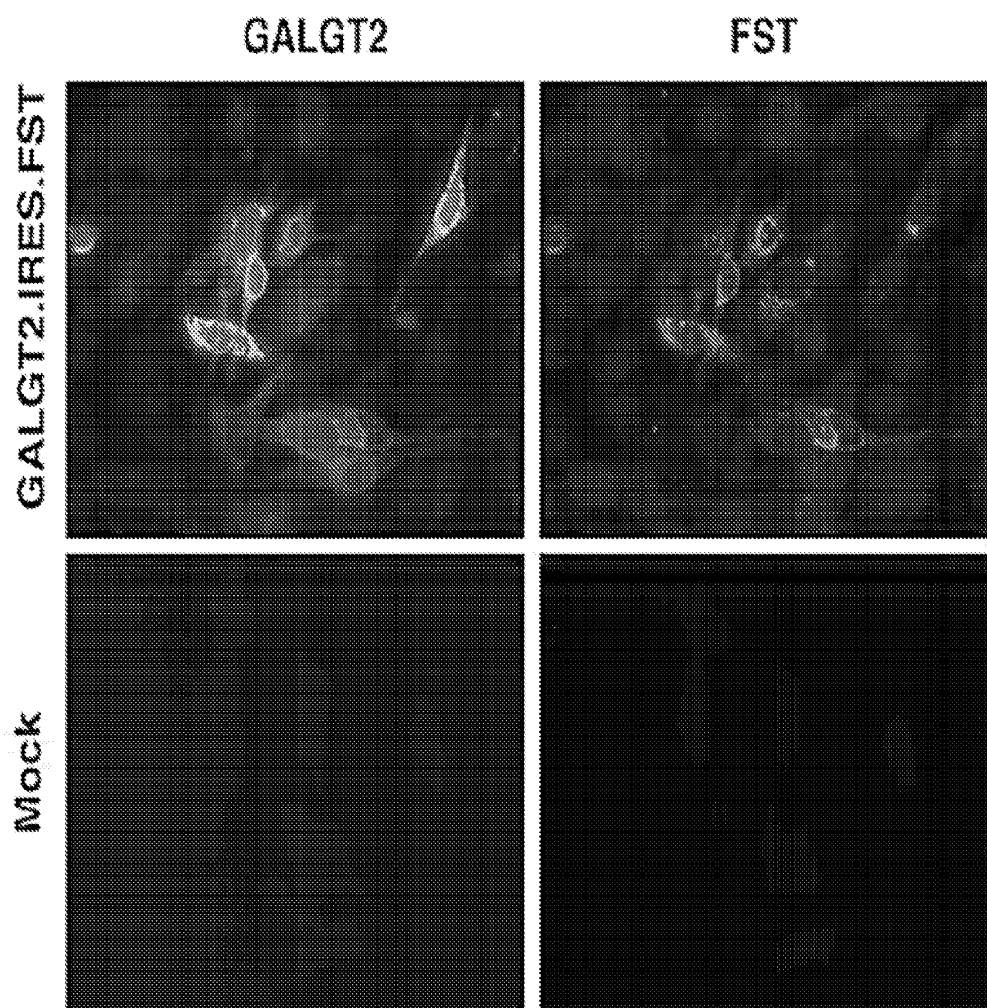


Figure 25

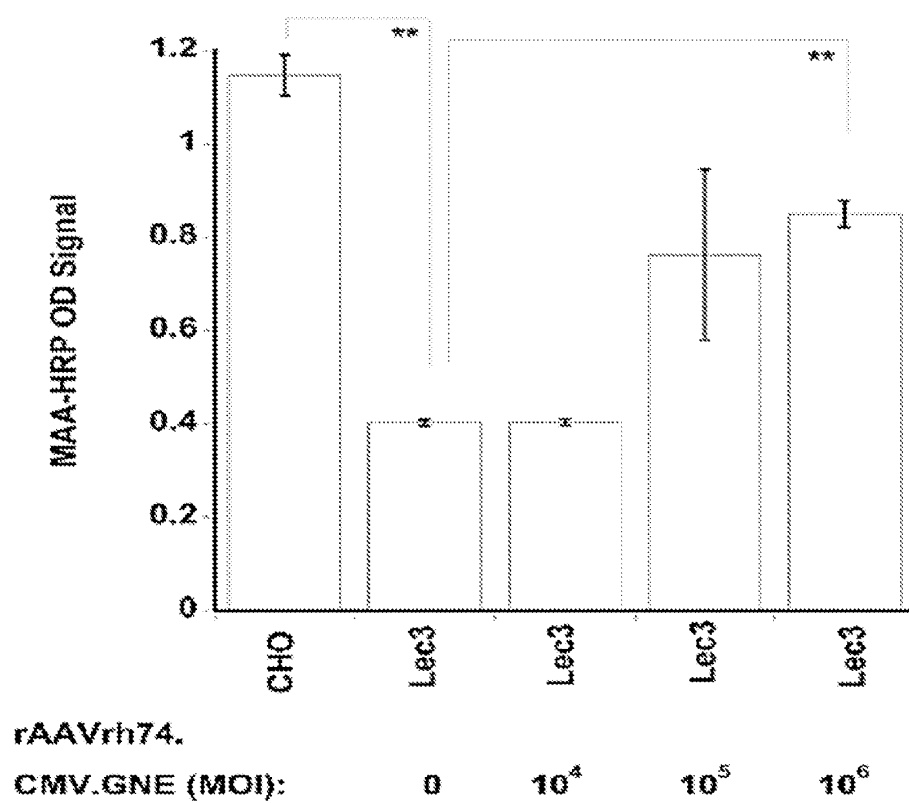


Figure 26

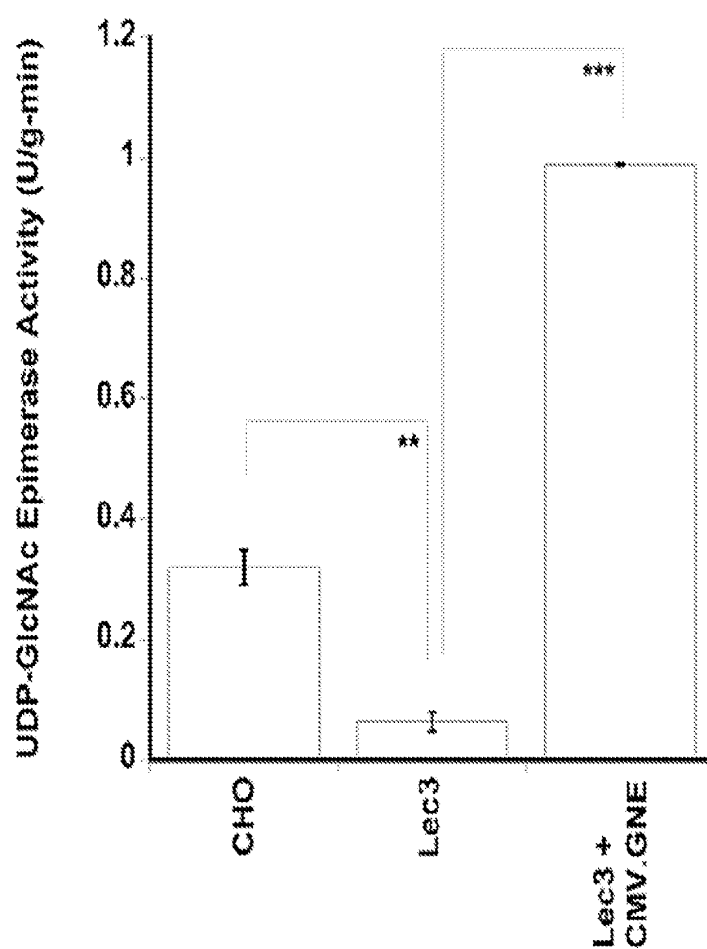


Figure 27

