

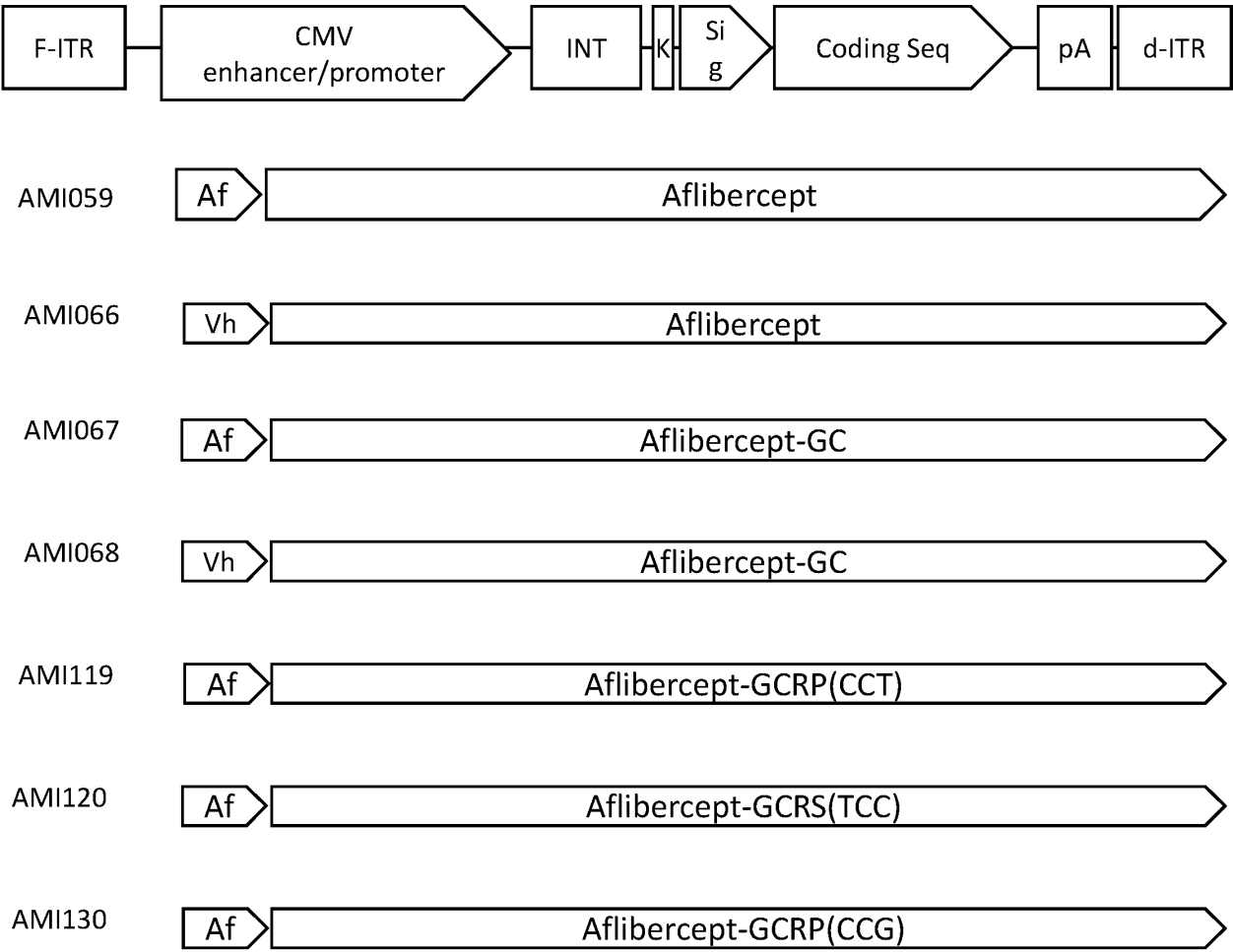
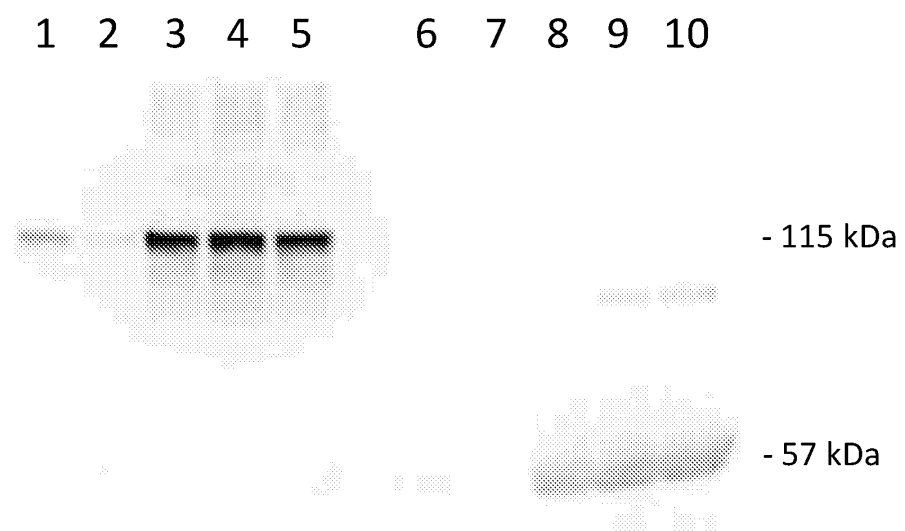


Fig. 1

**Fig. 2**

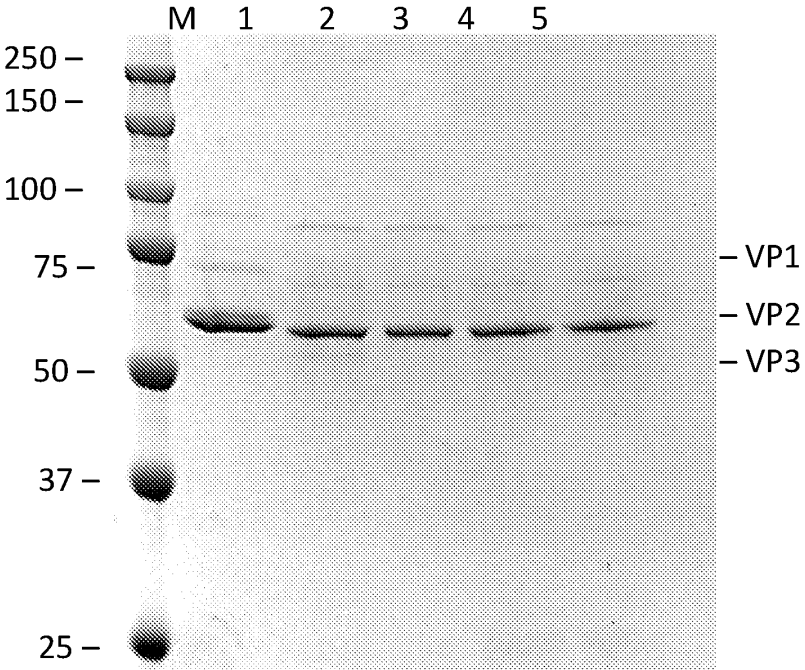


Fig. 3A

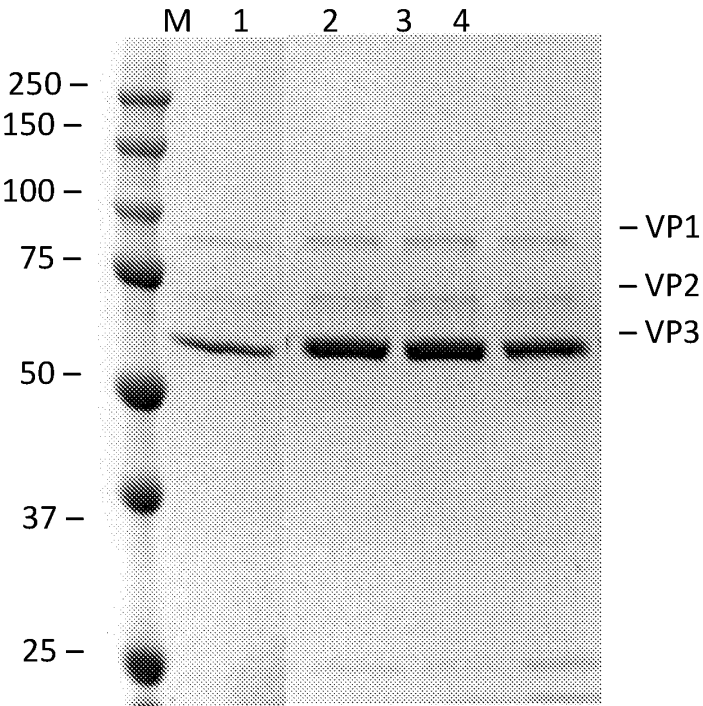
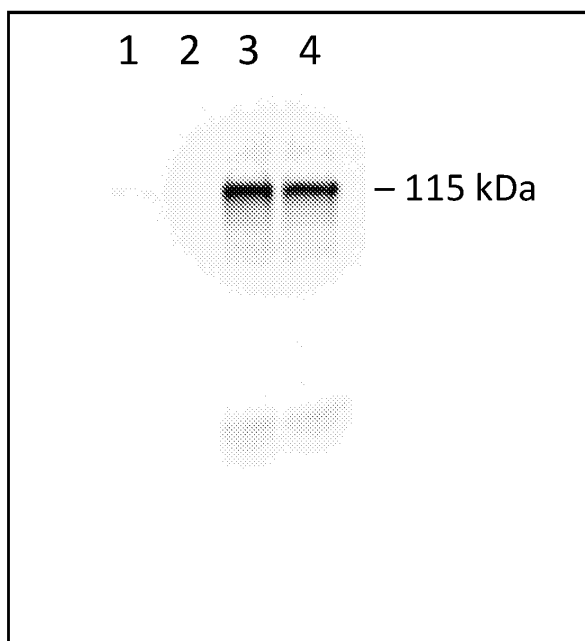
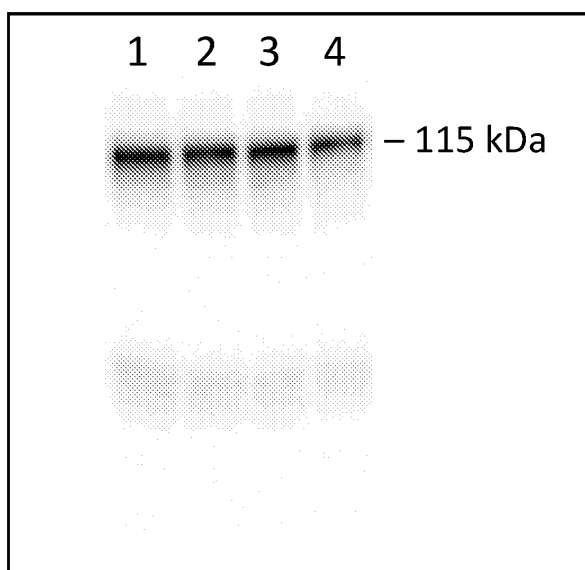


Fig. 3B

**Fig. 4A****Fig. 4B**

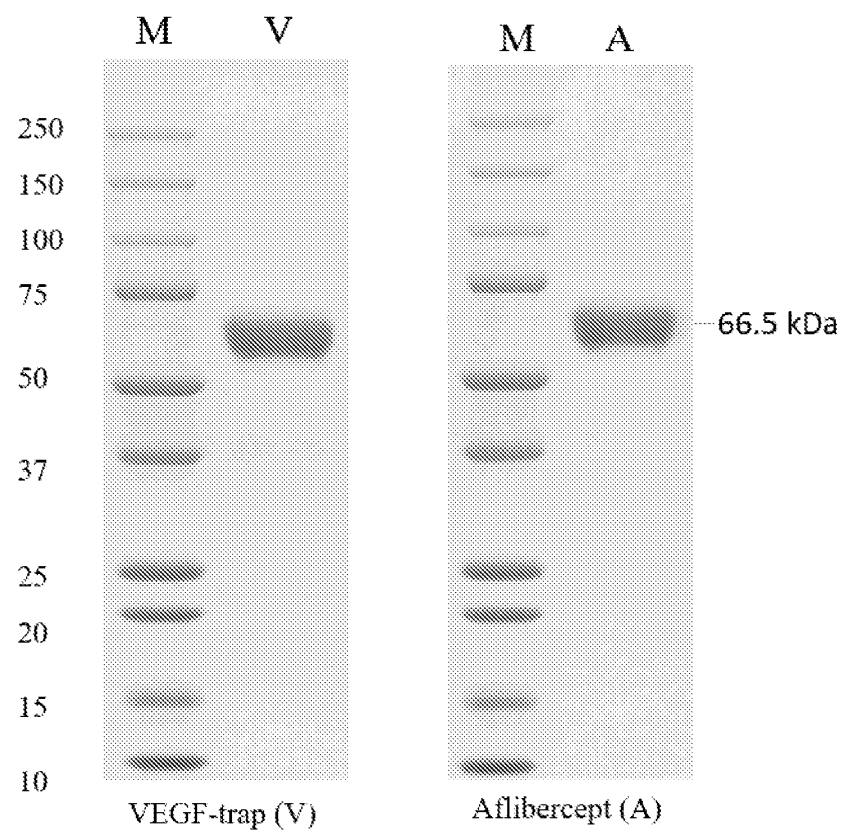
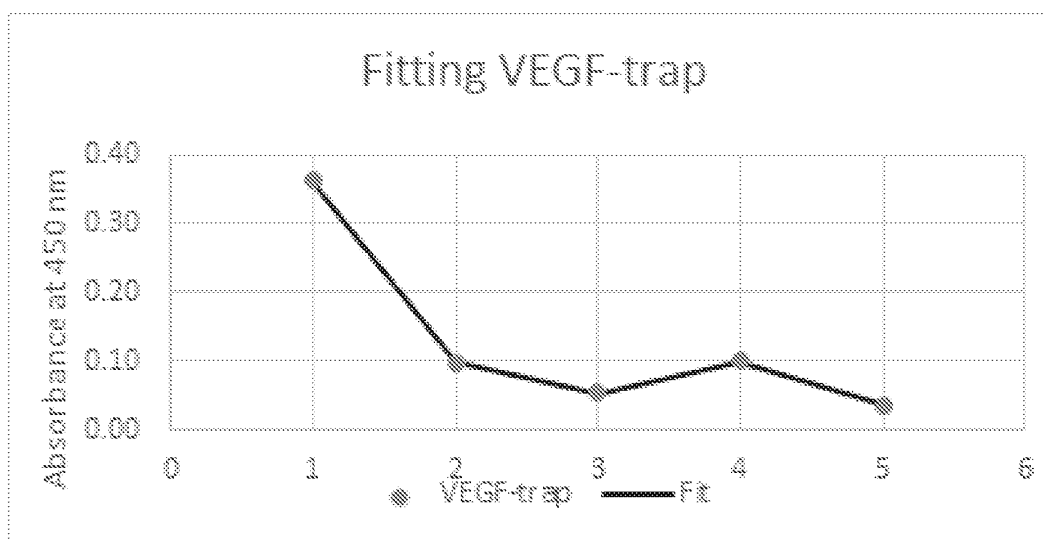
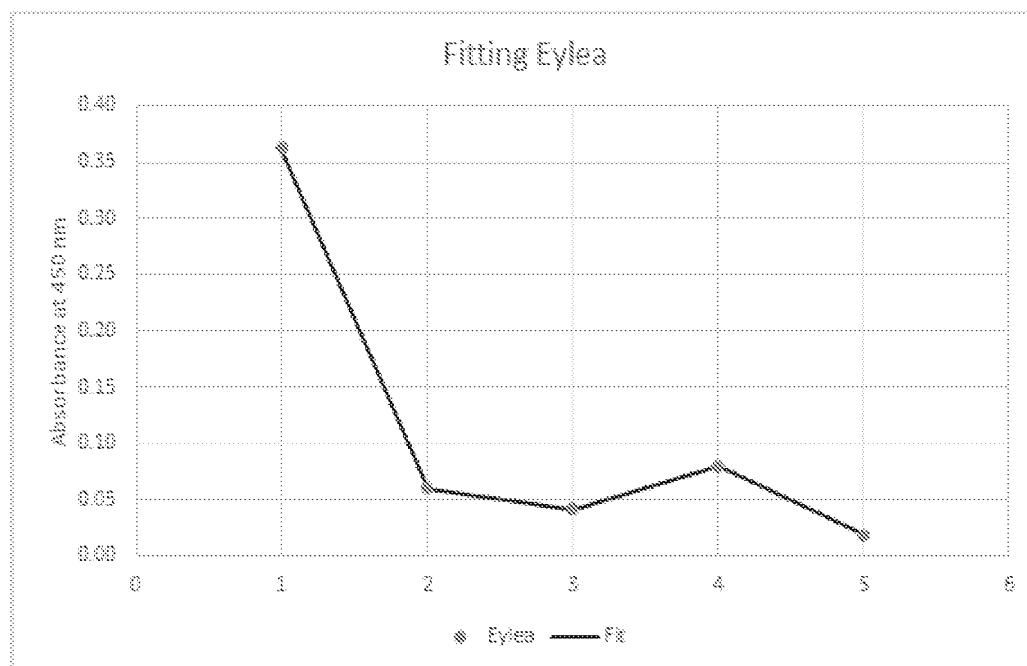


Fig. 5A

Fig. 5B**Fig. 5C**

AMI068-pFB-scCMV-SV40-intron-kozak-Vh-Aflibercept-GC

```
1   E F G L S W L F L V A I L K G V Q C D
1  ATGGAGTTTCGGCCTGAGCTGGCTGTTCTGGTGGCCATCCTTAAGGGCGTGCAGTGCGAC
20 T G R P F V E M Y S E I P E I I H M T E
61 ACCGGCAGACCCTTCGTGGAGATGTACAGCGAGATCCCCGAGATCATCCACATGACCGAG
40 G R E L V I P C R V T S P N I T V T L K
121 GGCAGAGAGCTGGTGATCCCCTGCAGAGTGACCAGCCCCAACATCACCGTGACCCTGAAG
60 K F P L D T L I P D G K R I I W D S R K
181 AAGTTCCCCCTGGACACCCTGATCCCCGACGGCAAGAGAATCATCTGGGACAGCAGAAAG
80 G F I I S N A T Y K E I G L L T C E A T
241 GGCTTCATCATCAGCAACGCCACCTACAAGGAGATCGGCCTGCTGACCTGCGAGGGCCACC
100 V N G H L Y K T N Y L T H R Q T N T I I
301 GTGAACGGCCACCTGTACAAGACCAACTACCTGACCCACAGACAGACCAACACCATCATC
120 D V V L S P S H G I E L S V G E K L V L
361 GACGTGGTGCTGAGCCCCAGCCACGGCATCGAGCTGAGCGTGGGCGAGAAGCTGGTGCTG
140 N C T A R T E L N V G I D F N W E Y P S
421 AACTGCACCGCCAGAACCAGCTGAACGTGGGCATCGACTTCAACTGGGAGTACCCCCAGC
160 S K H Q H K K L V N R D L K T Q S G S E
481 AGCAAGCACCAGCACAGAAGCTGGTGAACAGAGACCTGAAGACCCAGAGCGGCAGCGAG
180 M K K F L S T L T I D G V T R S D Q G L
541 ATGAAGAAGTTCTTGAGCACCTGACCATCGACGGCGTGACCAGAAGCGACCGAGGGCCTG
200 Y T C A A S S G L M T K K N S T F V R V
601 TACACCTGCGCCGCCAGCAGCGGCCTGATGACCAAGAAGAACAGCACCTTCGTGAGAGTG
220 H E K D K T H T C P P C P A P E L L G G
661 CACGAGAAGGACAAGACCCACACCTGCCCCCCTGCCCCGCCCCGAGCTGCTGGGCGGC
240 P S V F L F P P K P K D T L M I S R T P
721 CCCAGCGTGTTCTGTTCCTGTTCCCCCAAGCCCAAGGACACCCTGATGATCAGCAGAACCCCC
260 E V T C V V V D V S H E D P E V K F N W
781 GAGGTGACCTGCGTGGTGGTGGACGTGAGCCACGAGGACCCCGAGGTGAAGTTCAACTGG
280 Y V D G V E V H N A K T K P R E E Q Y N
841 TACGTGGACGGCGTGAGGTGCACAACGCCAAGACCAAGCCCAGAGAGGAGCAGTACAAC
300 S T Y R V V S V L T V L H Q D W L N G K
901 AGCACCTACAGAGTGGTGAGCGTGCTGACCGTGCTGCACCAGGACTGGCTGAACGGCAAG
320 E Y K C K V S N K A L P A P I E K T I S
961 GAGTACAAGTGCAAGGTGAGCAACAAGGCCCTGCCCGCCCCCATCGAGAAGACCATCAGC
340 K A K G Q P R E P Q V Y T L P P S R D E
1021 AAGGCCAAGGGCCAGCCCAGAGAGCCCCAGGTGTACACCCTGCCCCCAGCAGAGACGAG
360 L T K N Q V S L T C L V K G F Y P S D I
1081 CTGACCAAGAACCAGGTGAGCCTGACCTGCCTGGTGAAGGGCTTCTACCCCAGCGACATC
380 A V E W E S N G Q P E N N Y K T T P P V
1141 GCCGTGGAGTGGGAGAGCAACGGCCAGCCCAGACAACACTACAAGACCACCCCCCGTG
400 L D S D G S F F L Y S K L T V D K S R W
1201 CTGGACAGCGACGGCAGCTTCTTCCTGTACAGCAAGCTGACCGTGACCAAGAGCAGATGG
420 Q Q G N V F S C S V M H E A L H N H Y T
1261 CAGCAGGGCAACGTGTTTCAGCTGCAGCGTGATGCACGAGGCCCTGCACAACCACTACACC
440 Q K S L S L S P G K *
1321 CAGAAGAGCCTGAGCCTGAGCCCCGCAAGTGA
```

Fig. 6

AMI119-pFB-scCMV-SV40-intron-kozak-Af-Aflibercept-GCRP (CCT)

1 M V S Y W D T G V L L C A L L S C L L L
1 ATGGTGAGCTACTGGGACACCGGCGTGCTGCTGTGCGCCCTGCTGAGCTGCCTGCTGCTG
21 T G S S S G S D T G R P F V E M Y S E I
61 ACCGGCAGCAGCAGCGGCAGCGACACCGGCAGGCGTTTCGTGGAGATGTACAGCGAGATC
41 P E I I H M T E G R E L V I P C R V T S
121 CCTGAGATCATCCACATGACCGAGGGCAGGAGCTGGTGATCCCTTGCAAGGTGACCAGC
61 P N I T V T L K K F P L D T L I P D G K
181 CCTAACATCACCGTGACCCTGAAGAAGTTCCTCTGGACACCCTGATCCCTGACGGCAAG
81 R I I W D S R K G F I I S N A T Y K E I
241 AGGATCATCTGGGACAGCAGGAAGGGCTTCATCATCAGCAACGCCACCTACAAGGAGATC
101 G L L T C E A T V N G H L Y K T N Y L T
301 GGCCTGCTGACCTGCGAGGCCACCGTGAACGGCCACCTGTACAAGACCAACTACCTGACC
121 H R Q T N T I I D V V L S P S H G I E L
361 CACAGGCAGACCAACACCATCATCGACGTGGTGCTGAGCCTAGCCACGGCATCGAGCTG
141 S V G E K L V L N C T A R T E L N V G I
421 AGCGTGGGCGAGAAGCTGGTGCTGAACGCACCGCCAGGACCGAGCTGAACGTGGGCATC
161 D F N W E Y P S S K H Q H K K L V N R D
481 GACTTCAACTGGGAGTACCTAGCAGCAAGCACCAGCACAAGAAGCTGGTGAACAAGGAC
181 L K T Q S G S E M K K F L S T L T I D G
541 CTGAAGACCCAGAGCGGCAGCGAGATGAAGAAGTTCCTGAGCACCCCTGACCATCGACGGC
201 V T R S D Q G L Y T C A A S S G L M T K
601 GTGACCAGGAGCGACCGAGGGCCTGTACACCTGCGCCGCCAGCAGCGGCCTGATGACCAAG
221 K N S T F V R V H E K D K T H T C P P C
661 AAGAACAGCACCTTCGTGAGGGTGCACGAGAAGGACAAGACCCACACCTGCCCTCCTTGC
241 P A P E L L G G P S V F L F P P K P K D
721 CCTGCCCTGAGCTGCTGGGCGGCCCTAGCGTGTTCTGTTCCCTCCTAAGCCTAAGGAC
261 T L M I S R T P E V T C V V V D V S H E
781 ACCCTGATGATCAGCAGGACCCCTGAGGTGACCTGCGTGGTGGTGGACGTGAGCCACGAG
281 D P E V K F N W Y V D G V E V H N A K T
841 GACCCCTGAGGTGAAGTTCAACTGGTACGTGGACGGCGTGGAGGTGCACAACGCCAAGACC
301 K P R E E Q Y N S T Y R V V S V L T V L
901 AAGCCTAGGGAGGAGCAGTACAACAGCACCTACAGGGTGGTGAGCGTGCTGACCGTGCTG
321 H Q D W L N G K E Y K C K V S N K A L P
961 CACCAGGACTGGCTGAACGGCAAGGAGTACAAGTGCAAGGTGAGCAACAAGGCCCTGCCT
341 A P I E K T I S K A K G Q P R E P Q V Y
1021 GCCCCTATCGAGAAGACCATCAGCAAGGCCAAGGGCCAGCCTAGGGAGCCTCAGGTGTAC
361 T L P P S R D E L T K N Q V S L T C L V
1081 ACCCTGCCTCCTAGCAGGGACGAGCTGACCAAGAACCAGGTGAGCCTGACCTGCCTGGTG
381 K G F Y P S D I A V E W E S N G Q P E N
1141 AAGGGCTTCTACCTAGCGACATCGCCGTGGAGTGGGAGAGCAACGGCCAGCCTGAGAAC
401 N Y K T T P P V L D S D G S F F L Y S K
1201 AACTACAAGACCACCCTCCTGTGCTGGACAGCGACGGCAGCTTCTTCTGTACAGCAAG
421 L T V D K S R W Q Q G N V F S C S V M H
1261 CTGACCGTGGACAAGAGCAGGTGGCAGCAGGGCAACGTGTTTCAGCTGCAGCGTGATGCAC
441 E A L H N H Y T Q K S L S L S P G K *
1321 GAGGCCCTGCACAACCACTACCCAGAAGAGCCTGAGCCTGAGCCCTGGCAAGTGA

Fig. 7

AMI120-pFB-scCMV-SV40-intron-kozak-Af-Aflibercept-GCRS (TCC), version 2

1 M V S Y W D T G V L L C A L L S C L L L
1 ATGGTGAGCTACTGGGACACCGGCGTGCTGCTGTGCGCCCTGCTGAGCTGCCTGCTGCTG
21 T G S S S G S D T G R P F V E M Y S E I
61 ACCGGCAGCAGCAGCGGCAGCGACACCGGCAGGCCCTTCGTGGAGATGTACTCCGAGATC
41 P E I I H M T E G R E L V I P C R V T S
121 CCCGAGATCATCCACATGACCGAGGGCAGGGAGCTGGTGATCCCCCTGCAGGGTGACCTCC
61 P N I T V T L K K F P L D T L I P D G K
181 CCCAACATCACCCTGACCCTGAAGAGTTCCCCCTGGACACCCTGATCCCCGACGGCAAG
81 R I I W D S R K G F I I S N A T Y K E I
241 AGGATCATCTGGGACTCCAGGAAGGGCTTCATCATCTCCAACGCCACCTACAAGGAGATC
101 G L L T C E A T V N G H L Y K T N Y L T
301 GGCCTGCTGACCTGCGAGGCCACCGTGAACGGCCACCTGTACAAGACCAACTACCTGACC
121 H R Q T N T I I D V V L S P S H G I E L
361 CACAGGCAGACCAACACCATCATCGAGCTGGTGCTGTCCCCCTCCACGGCATCGAGCTG
141 S V G E K L V L N C T A R T E L N V G I
421 TCCGTGGGCGAGAAGCTGGTGCTGAAGTGCACCGCCAGGACCGAGCTGAACGTGGGCATC
161 D F N W E Y P S S K H Q H K K L V N R D
481 GACTTCAACTGGGAGTACCCCCTCCCAAGCACCAGCACAGAAGCTGGTGAACAGGGAC
181 L K T Q S G S E M K K F L S T L T I D G
541 CTGAAGACCCAGTCCGGCTCCGAGATGAAGAAGTTCTGTCCACCCTGACCATCGACGGC
201 V T R S D Q G L Y T C A A S S G L M T K
601 GTGACCAGGTCCGACCGAGGGCTGTACACCTGCGCCGCCCTCCCGGCTGATGACCAAG
221 K N S T F V R V H E K D K T H T C P P C
661 AAGAATCCACCTTCGTGAGGGTGACGAGAAGGACAAGACCCACACCTGCCCCCCTGC
241 P A P E L L G G P S V F L F P P K P K D
721 CCCGCCCCGAGCTGCTGGGCGGCCCCCTCCGTGTTCTGTTCCTGTTCCCCCAAGCCCAAGGAC
261 T L M I S R T P E V T C V V V D V S H E
781 ACCCTGATGATCTCCAGGACCCCCGAGGTGACCTGCGTGGTGGTGGACGTGTCCCACGAG
281 D P E V K F N W Y V D G V E V H N A K T
841 GACCCCGAGGTGAAGTTCAACTGGTACGTGGACGGCGTGGAGGTGCACAACGCCAAGACC
301 K P R E E Q Y N S T Y R V V S V L T V L
901 AAGCCCAGGGAGGAGCAGTACAACCTCACCTACAGGGTGGTGTCCGTGCTGACCGTGCTG
321 H Q D W L N G K E Y K C K V S N K A L P
961 CACCAGGACTGGCTGAACGGCAAGGAGTACAAGTGCAAGGTGTCCAACAAGGCCCTGCCC
341 A P I E K T I S K A K G Q P R E P Q V Y
1021 GCCCCCATCGAGAAGACCATCTCCAAGGCCAAGGGCCAGCCCAGGGAGCCCCAGGTGTAC
361 T L P P S R D E L T K N Q V S L T C L V
1081 ACCCTGCCCCCTCCAGGACGAGCTGACCAAGAACCAGGTGTCCCTGACCTGCCTGGTG
381 K G F Y P S D I A V E W E S N G Q P E N
1141 AAGGGCTTCTACCCCCTCCGACATCGCCGTGGAGTGGGAGTCCAACGGCCAGCCCAGAGAAC
401 N Y K T T P P V L D S D G S F F L Y S K
1201 AACTACAAGACCACCCCCCGTGTGGACCTCCGACGGCTCCTTCTCTGTGTACCCAAG
421 L T V D K S R W Q Q G N V F S C S V M H
1261 CTGACCGTGGACAAGTCCAGGTGGCAGCGGCAACGTGTTCTCCTGCTCCGTGATGCAC
441 E A L H N H Y T Q K S L S L S P G K *
1321 GAGGCCCTGCACAACCACTACCCCGAAGTCCCTGTCCCTGTCCCCCGCAAGTGA

Fig. 8

AMI130-pFB-scCMV-SV40-intron-kozak-Af-Aflibercept-GCRP (CCG)

1 M V S Y W D T G V L L C A L L S C L L L
1 ATGGTGAGCTACTGGGACACCGGCGTGCTGCTGTGCGCCCTGCTGAGCTGCCTGCTGCTG
21 T G S S S G S D T G R P F V E M Y S E I
61 ACCGGCAGCAGCAGCGGCAGCGACACCGGCAGGCCGTTCTGTGGAGATGTACAGCGAGATC
41 P E I I H M T E G R E L V I P C R V T S
121 CCGGAGATCATCCACATGACCGAGGGCAGGGAGCTGGTGATCCCGTGCAGGGTGACCAGC
61 P N I T V T L K K F P L D T L I P D G K
181 CCGAACATCACCGTGACCCTGAAGAAGTTCCTGCTGGACACCCTGATCCCGGACGGCAAG
81 R I I W D S R K G F I I S N A T Y K E I
241 AGGATCATCTGGGACAGCAGGAAGGGCTTCATCATCAGCAACGCCACCTACAAGGAGATC
101 G L L T C E A T V N G H L Y K T N Y L T
301 GGCCTGTGTACCTGCGAGGCCACCGTGAACGGCCACCTGTACAAGACCAACTACCTGACC
121 H R Q T N T I I D V V L S P S H G I E L
361 CACAGGCAGACCAACACCATCATCGACGTGGTGCTGAGCCGAGCCACGGCATCGAGCTG
141 S V G E K L V L N C T A R T E L N V G I
421 AGCGTGCGGAGAGCTGGTGCTGAAGTGCACCGCCAGGACCGAGCTGAACGTGGGCATC
161 D F N W E Y P S S K H Q H K K L V N R D
481 GACTTCAACTGGGAGTACCCGAGCAGCAAGCACCAGCACAAGAAGCTGGTGAACAGGGAC
181 L K T Q S G S E M K K F L S T L T I D G
541 CTGAAGACCCAGAGCGGCAGCGAGATGAAGAAGTTCCTGAGCACCTGACCATCGACGGC
201 V T R S D Q G L Y T C A A S S G L M T K
601 GTGACCAGGAGCGACAGGGCCTGTACACCTGCGCCGCCAGCAGCGGCCTGATGACCAAG
221 K N S T F V R V H E K D K T H T C P P C
661 AAGAACAGCACCTTCGTGAGGGTGCACGAGAAGGACAAGACCCACACCTGCCCGCCGTGC
241 P A P E L L G G P S V F L F P P K P K D
721 CCGGCCCGGAGCTGCTGGGCGGCCTGAGCGTGTTCCTGTTCCTGCGGCAAGCCGAAGGAC
261 T L M I S R T P E V T C V V V D V S H E
781 ACCCTGATGATCAGCAGGACCCGGAGGTGACCTGCGTGGTGGTGGACGTGAGCCACGAG
281 D P E V K F N W Y V D G V E V H N A K T
841 GACCCGGAGGTGAAGTTCAACTGGTACGTGGACGGCGTGGAGGTGCACAACGCCAAGACC
301 K P R E E Q Y N S T Y R V V S V L T V L
901 AAGCCGAGGGAGGAGCAGTACAACAGCACCTACAGGGTGGTGAGCGTGCTGACCGTGCTG
321 H Q D W L N G K E Y K C K V S N K A L P
961 CACCAGGACTGGCTGAACGGCAAGGAGTACAAGTGAAGGTGAGCAACAAGGCCCTGCCG
341 A P I E K T I S K A K G Q P R E P Q V Y
1021 GCCCGATCGAGAAGACCATCAGCAAGGCCAAGGGCCAGCCGAGGGAGCCGAGGTGTAC
361 T L P P S R D E L T K N Q V S L T C L V
1081 ACCCTGCCGCCGAGCAGGACGAGCTGACCAAGAACCAGGTGAGCCTGACCTGCCTGGTG
381 K G F Y P S D I A V E W E S N G Q P E N
1141 AAGGGCTTCTACCCGAGCGACATCGCCGTGGAGTGGGAGAGCAACGGCCAGCCGAGAAC
401 N Y K T T P P V L D S D G S F F L Y S K
1201 AACTACAAGACCACCCCGCGGTGCTGGACAGCGACGGCAGCTTCTTCTGTACAGCAAG
421 L T V D K S R W Q Q G N V F S C S V M H
1261 CTGACCGTGGACAAGAGCAGGTGGCAGCAGGGCAACGTGTTTCAGCTGCAGCGTGATGCAC
441 E A L H N H Y T Q K S L S L S P G K *
1321 GAGGCCCTGCACAACCACTACACCCAGAAGAGCCTGAGCCTGAGCCCCGGCAAGTGA

Fig. 9

Fig. 10A

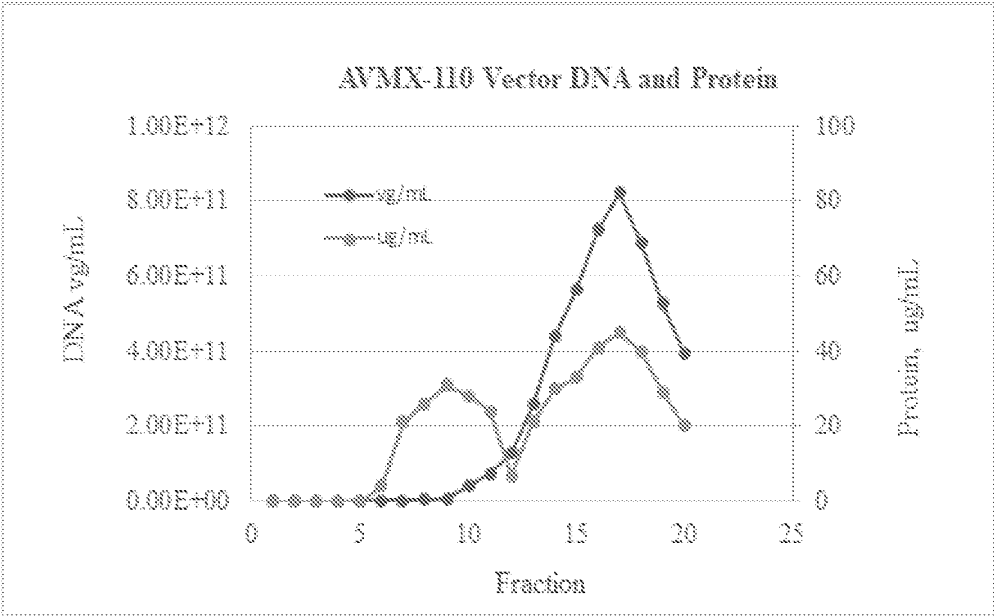
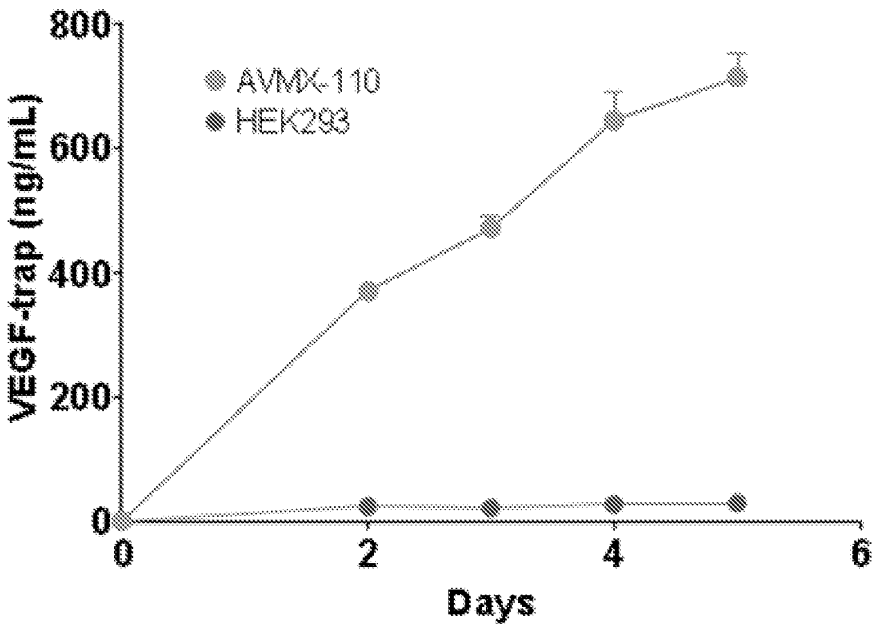


Fig. 10B

VEGF-trap expression in cells transduced with and without AVMX-110



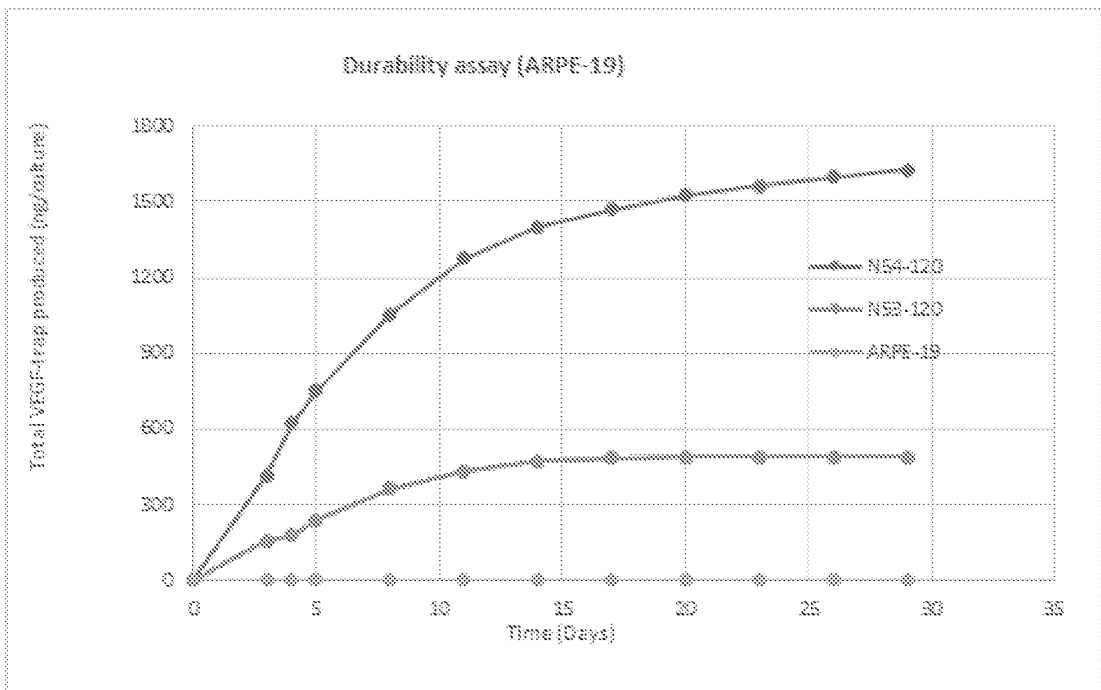
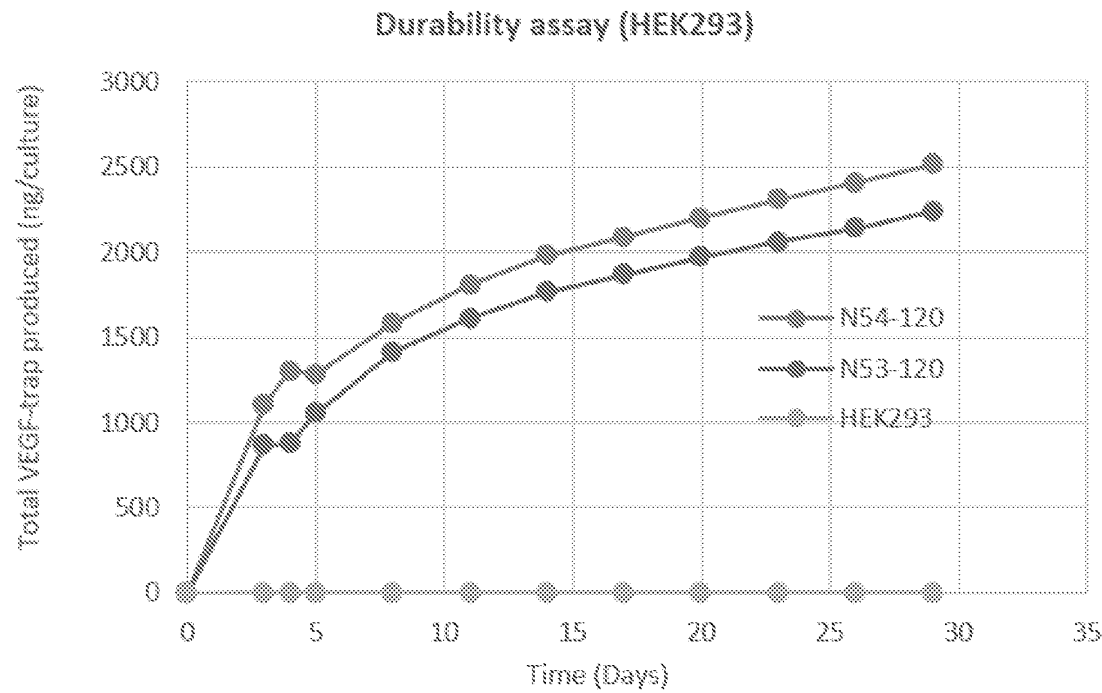


Fig. 11

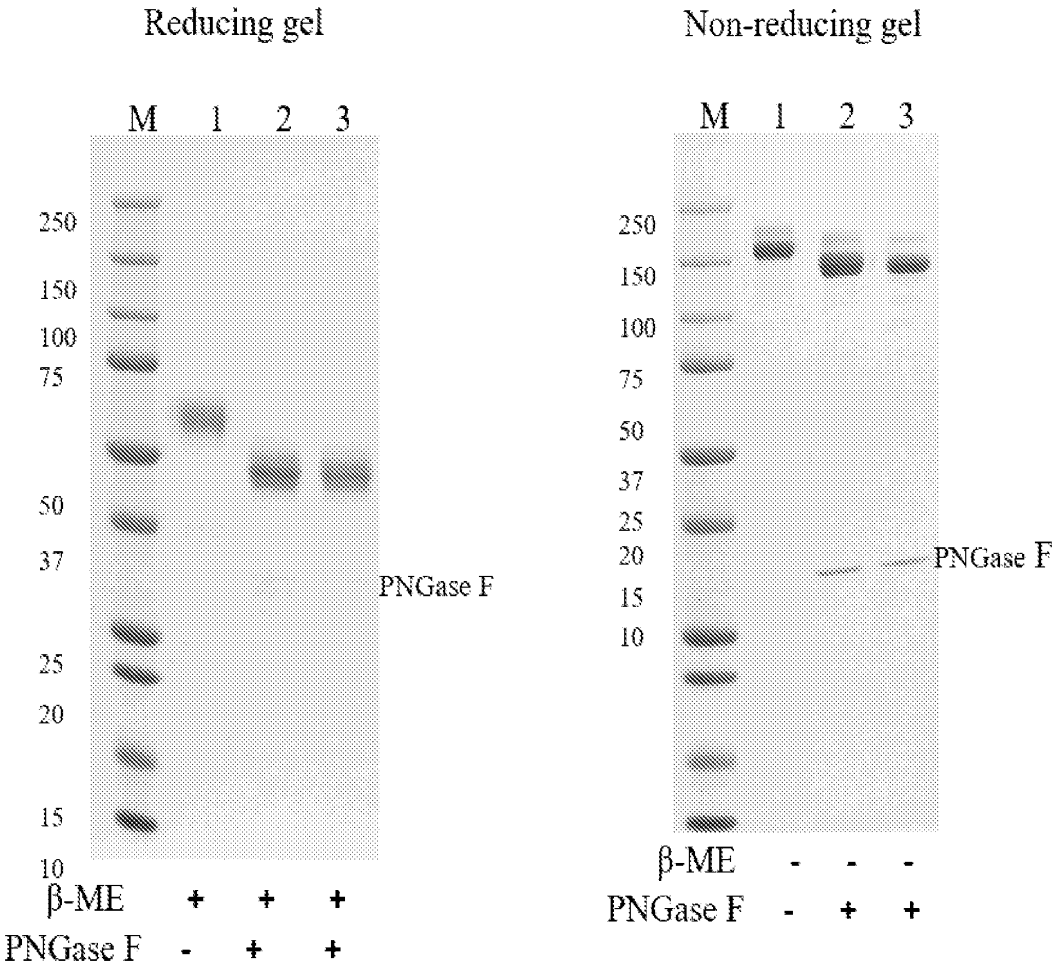


Fig. 12

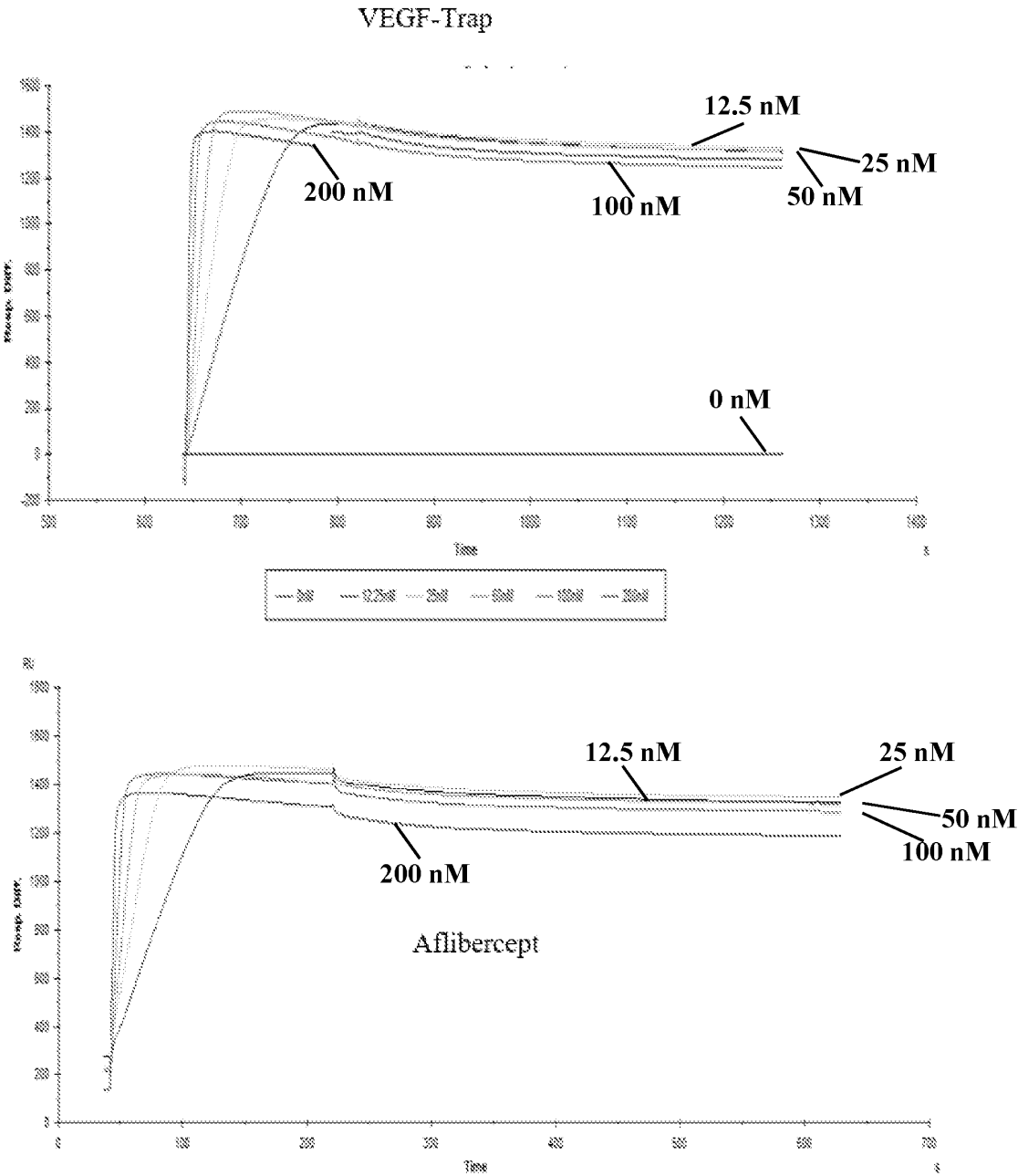


Fig. 13

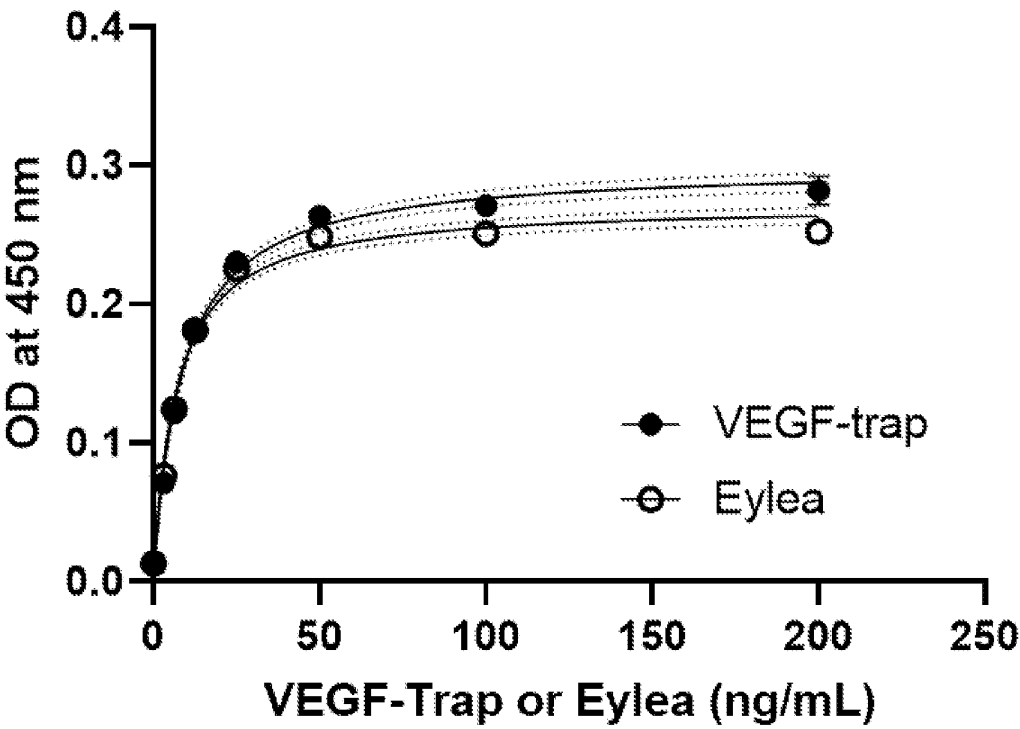


Fig. 14

AAV₂•VEGF-trap vs Commercial Aflibercept

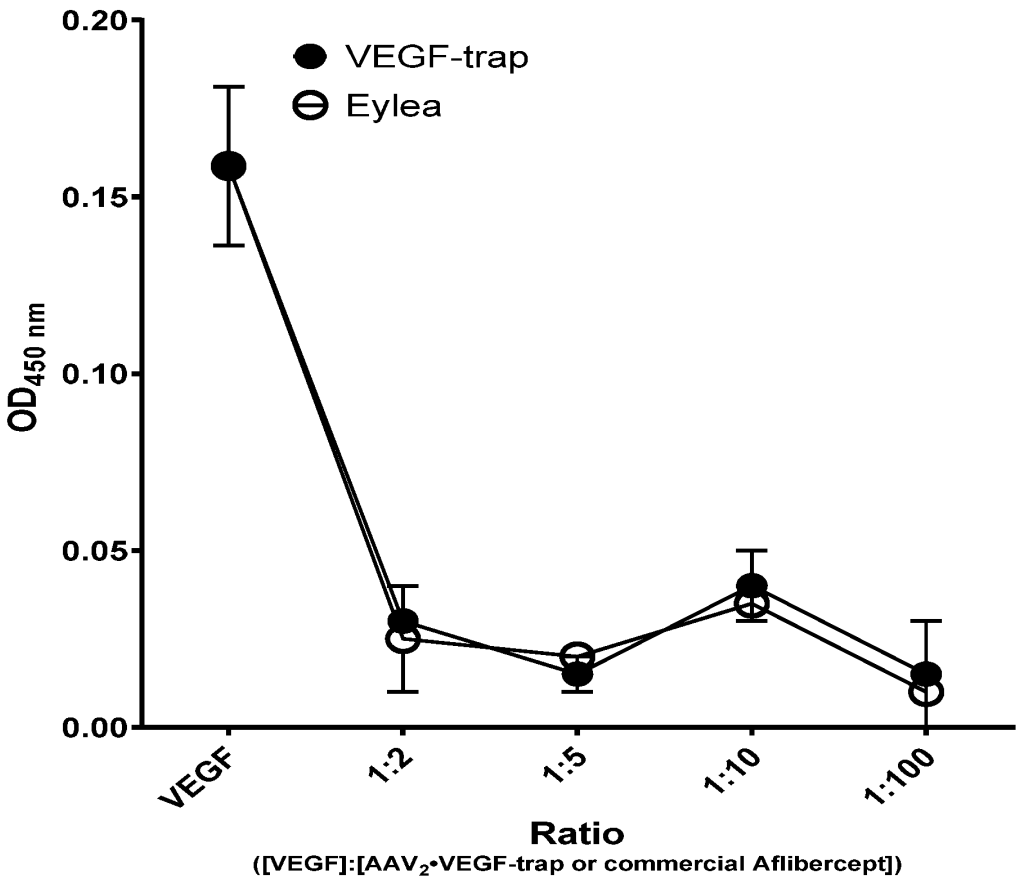


Fig. 15

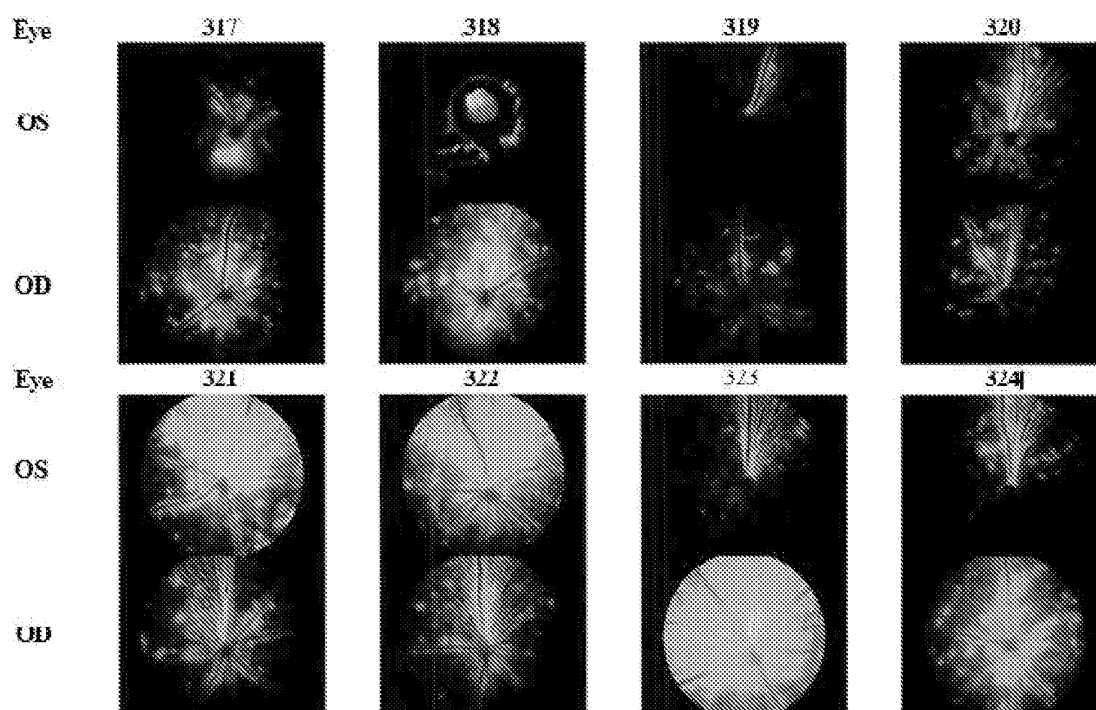
Fig. 16

Fig. 17

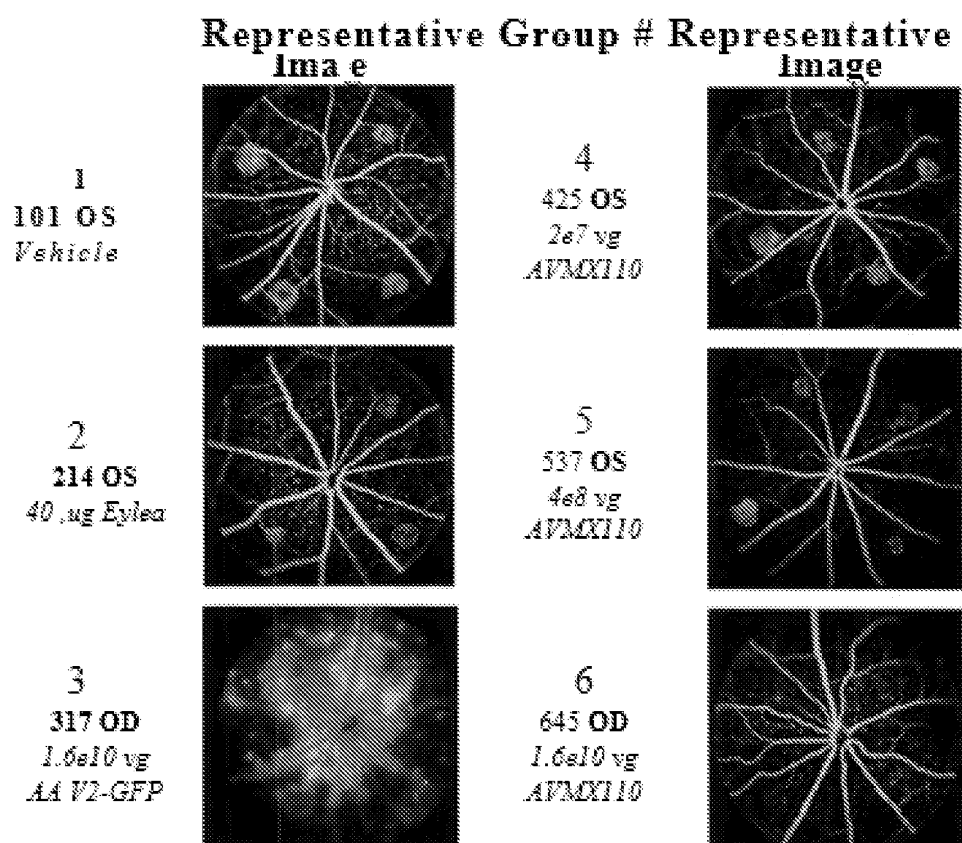


Fig. 18

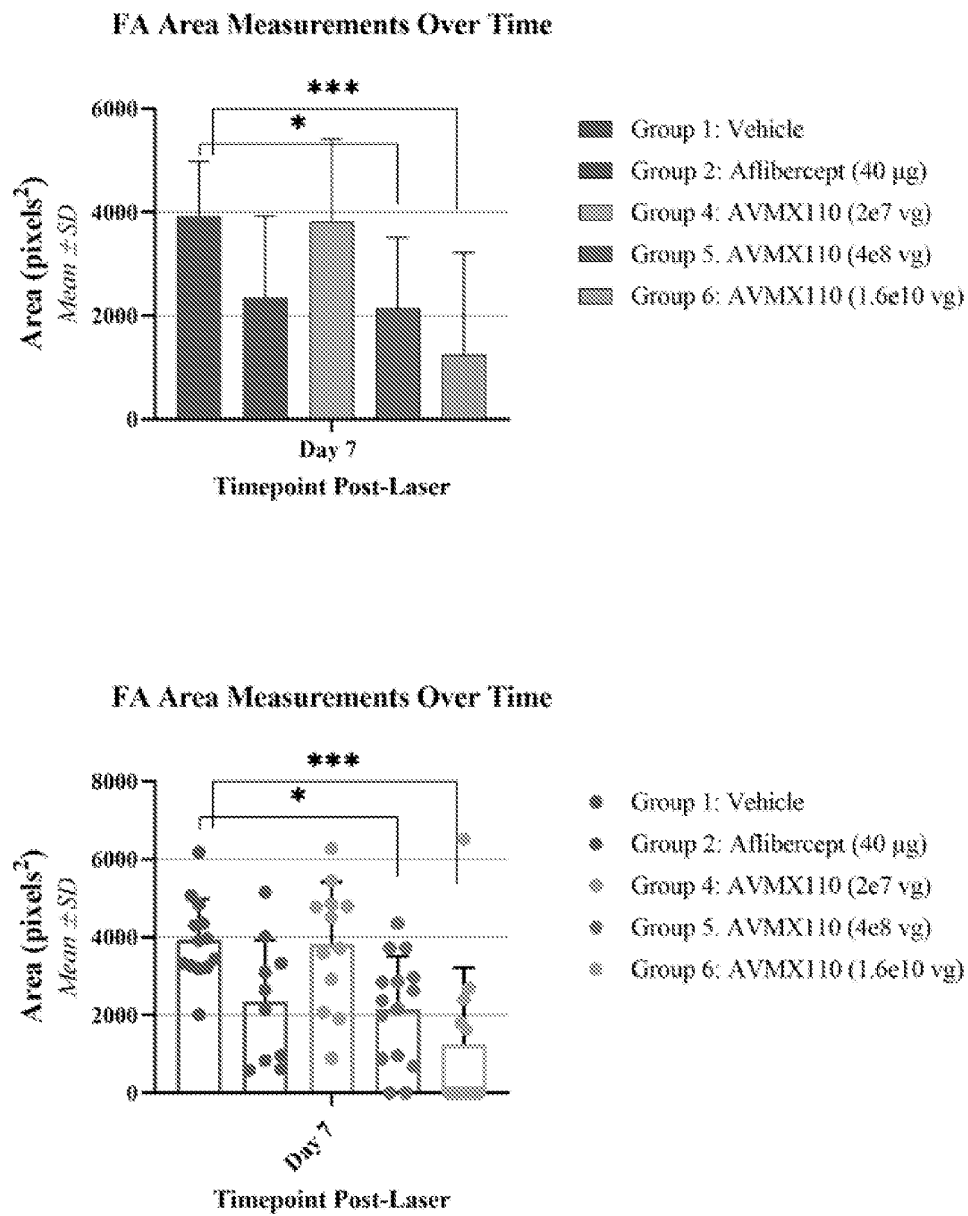


Fig. 19

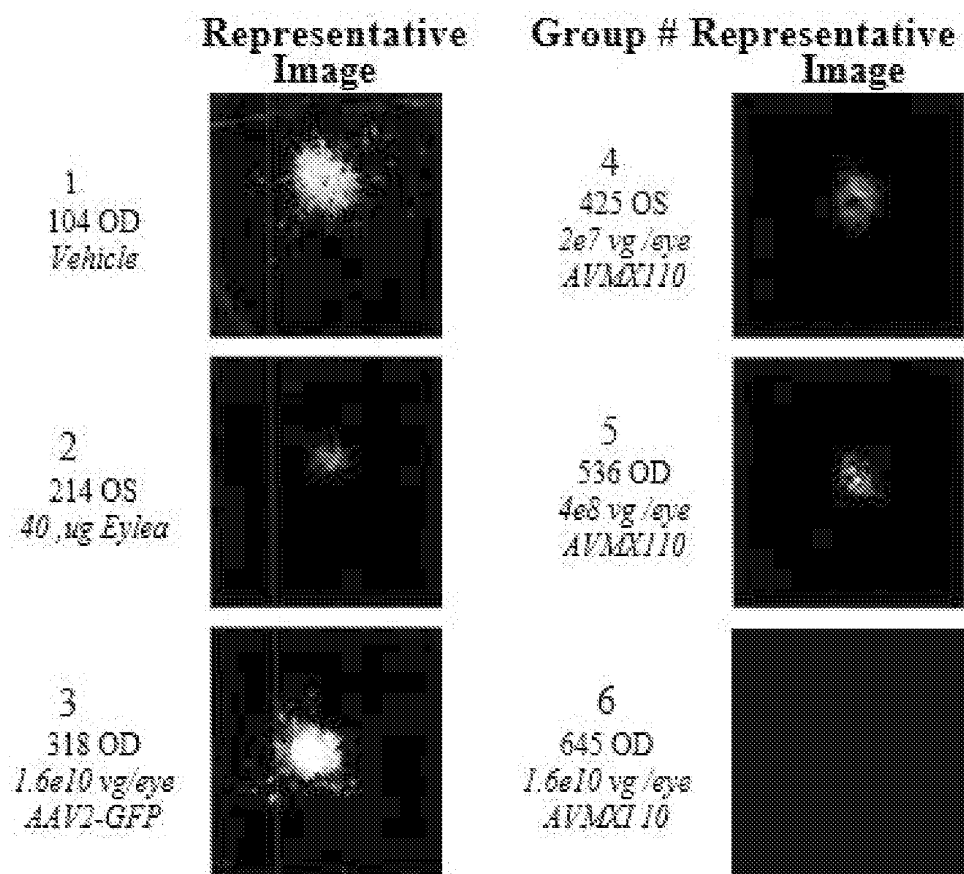


Fig. 20

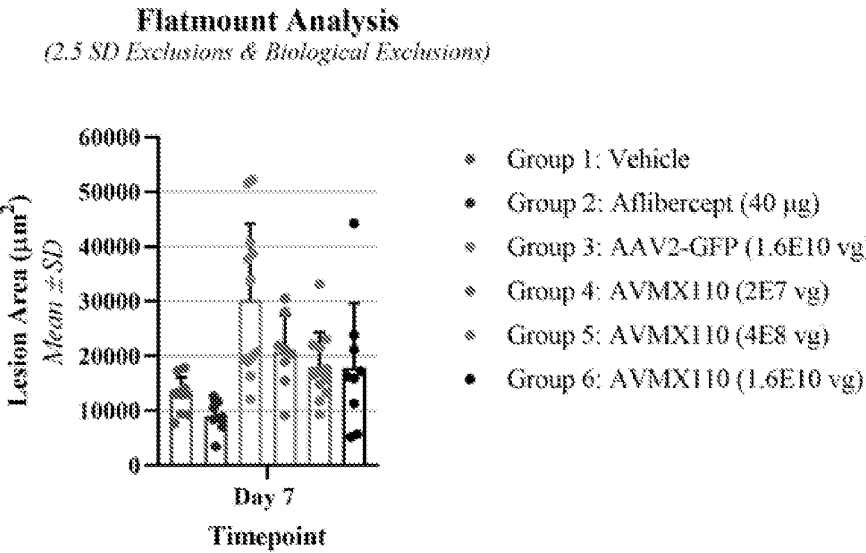
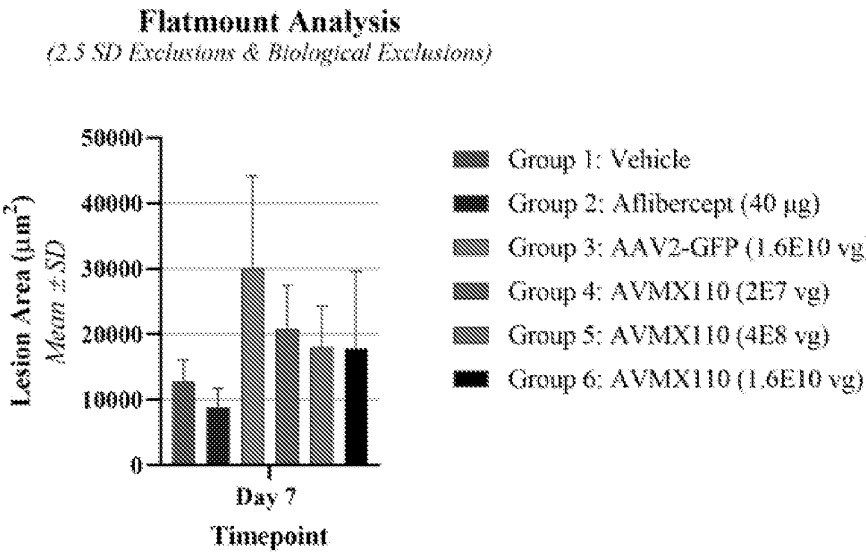


Fig. 21

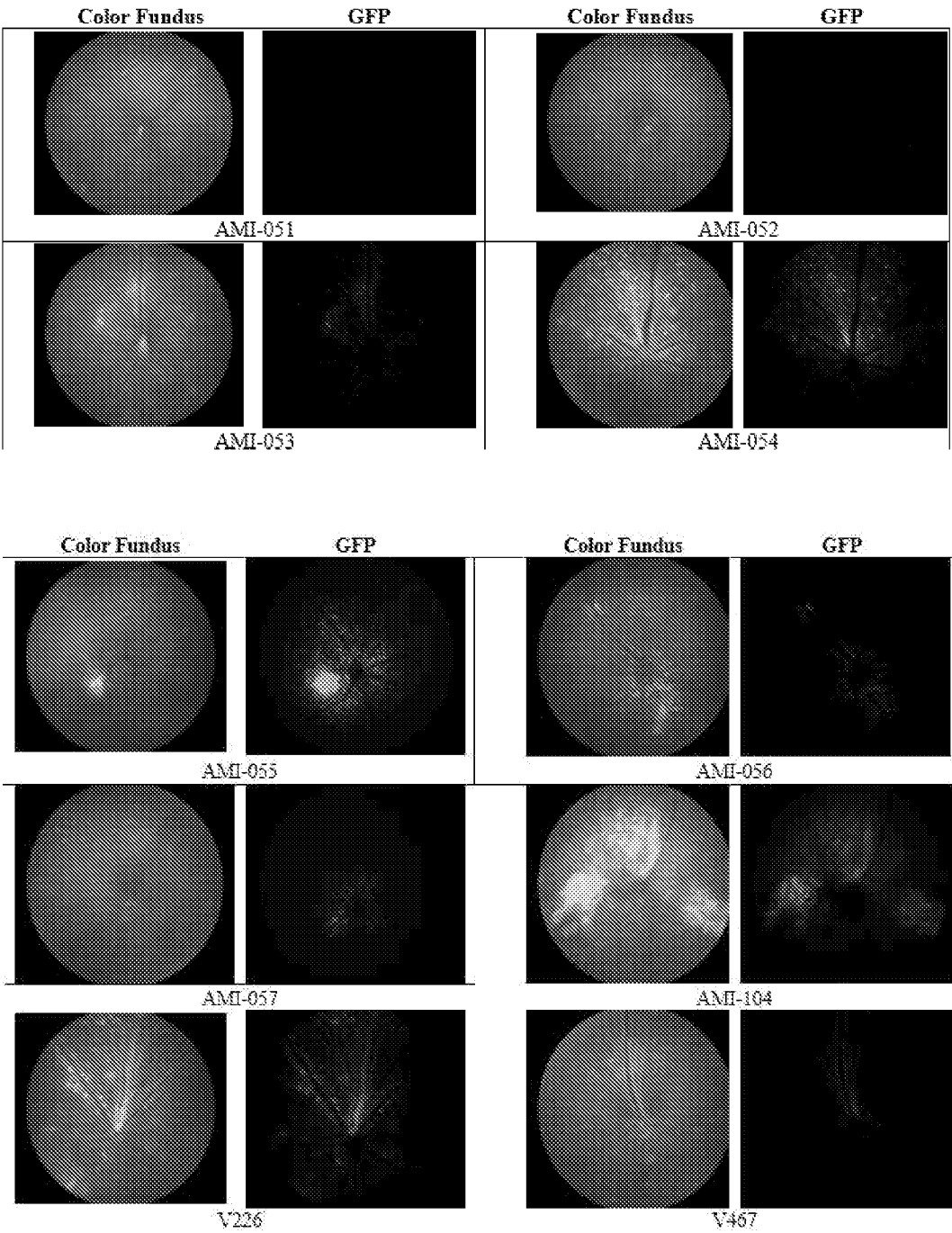


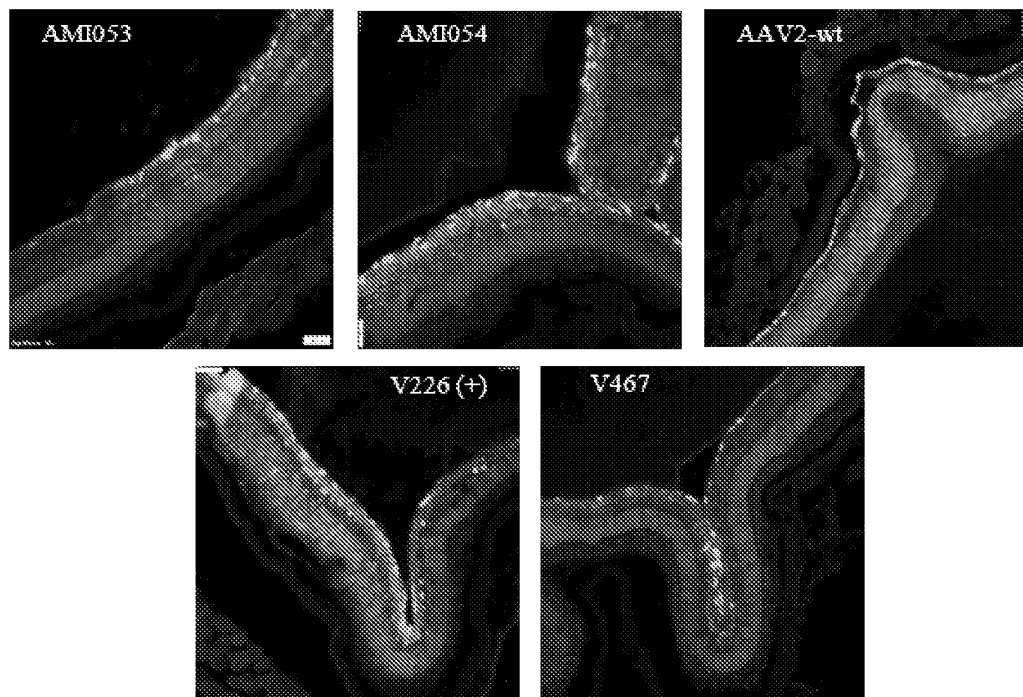
Fig. 22

Fig. 23

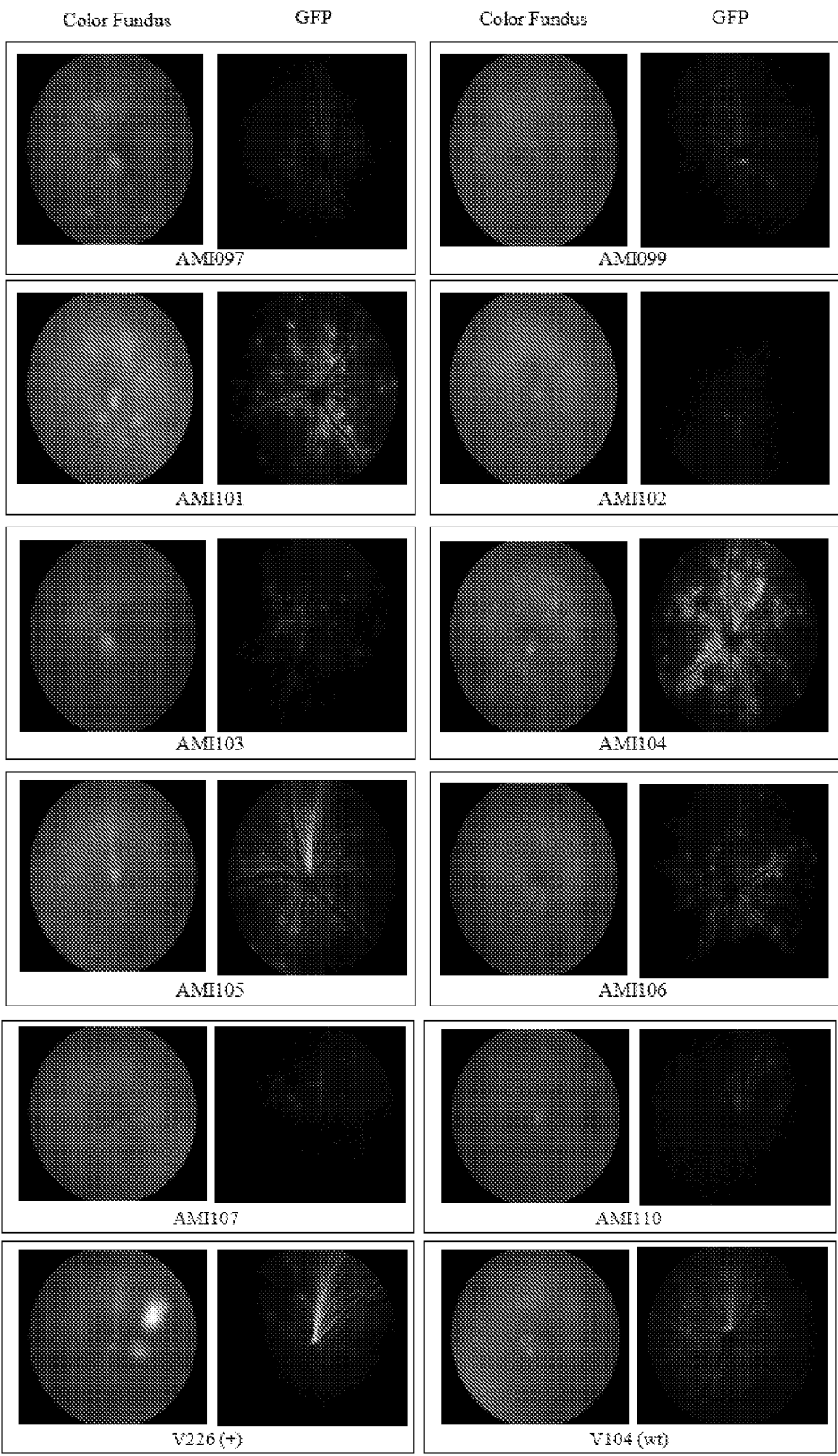


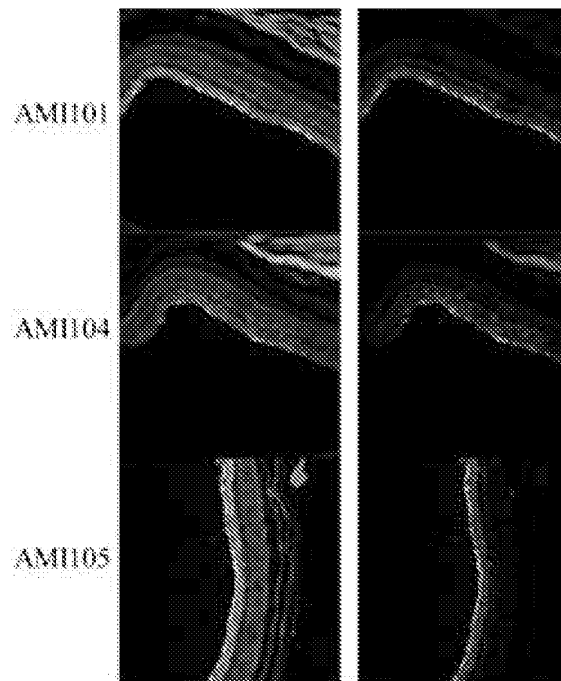
Fig. 24

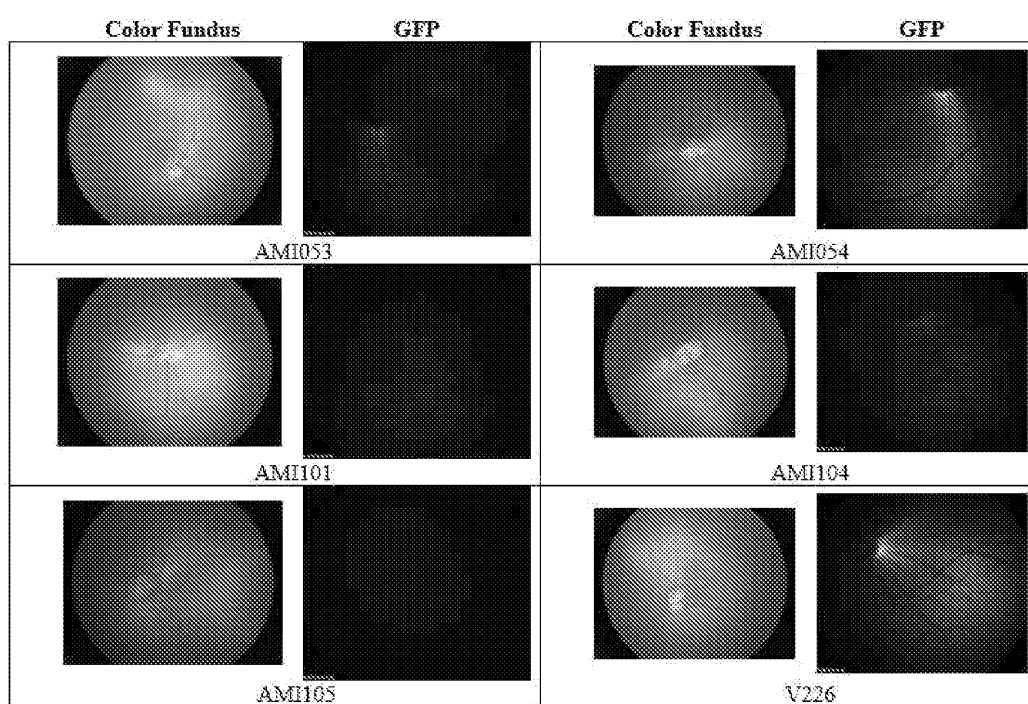
Fig. 25

Fig. 26

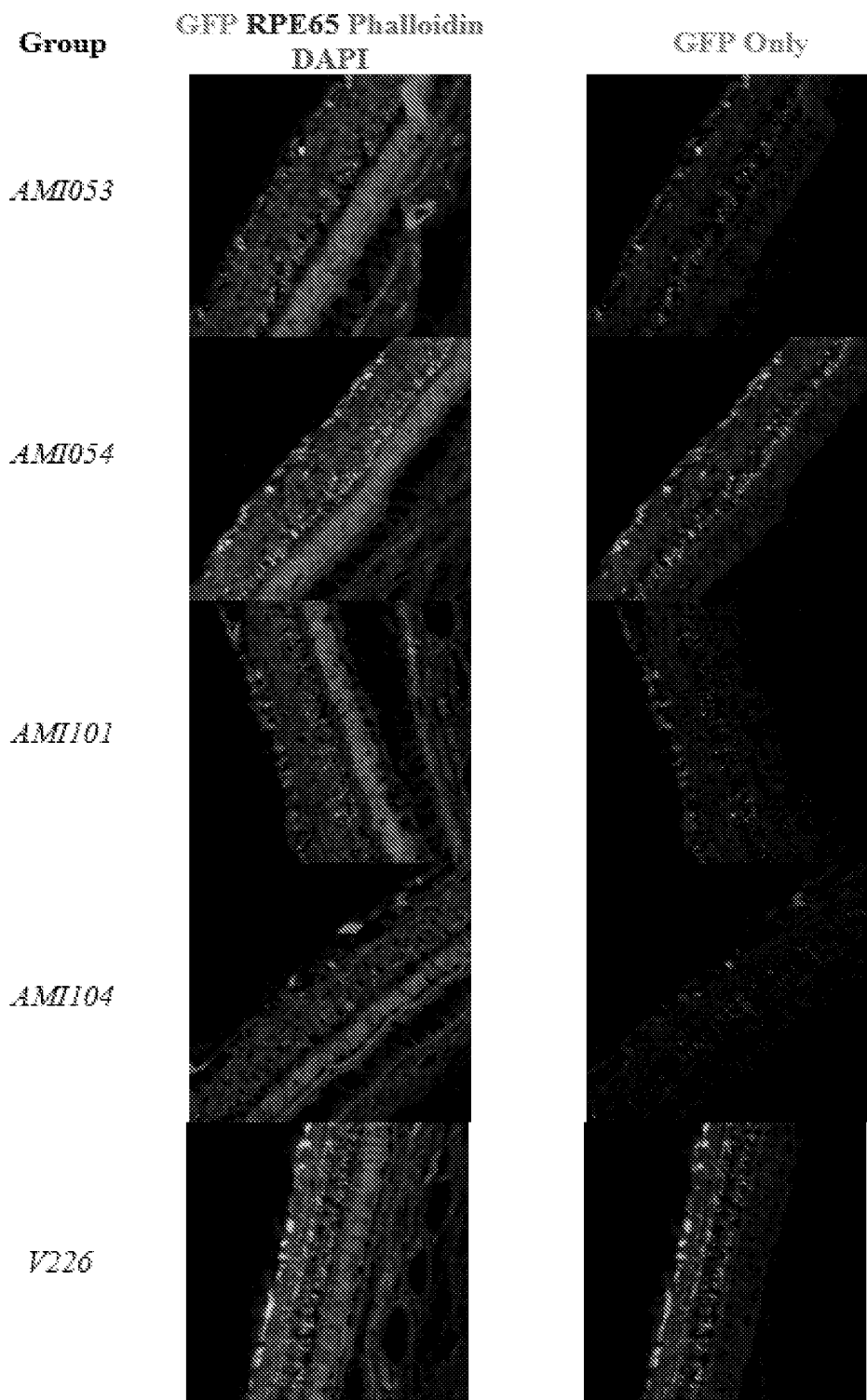


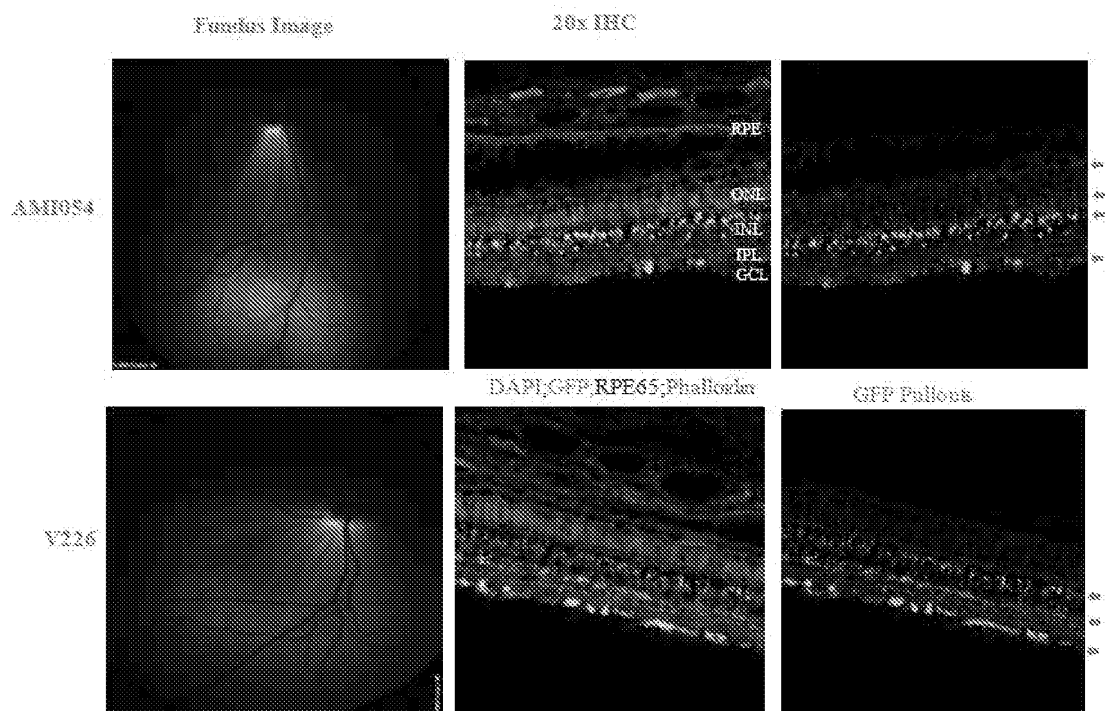
Fig. 27

Fig. 28A

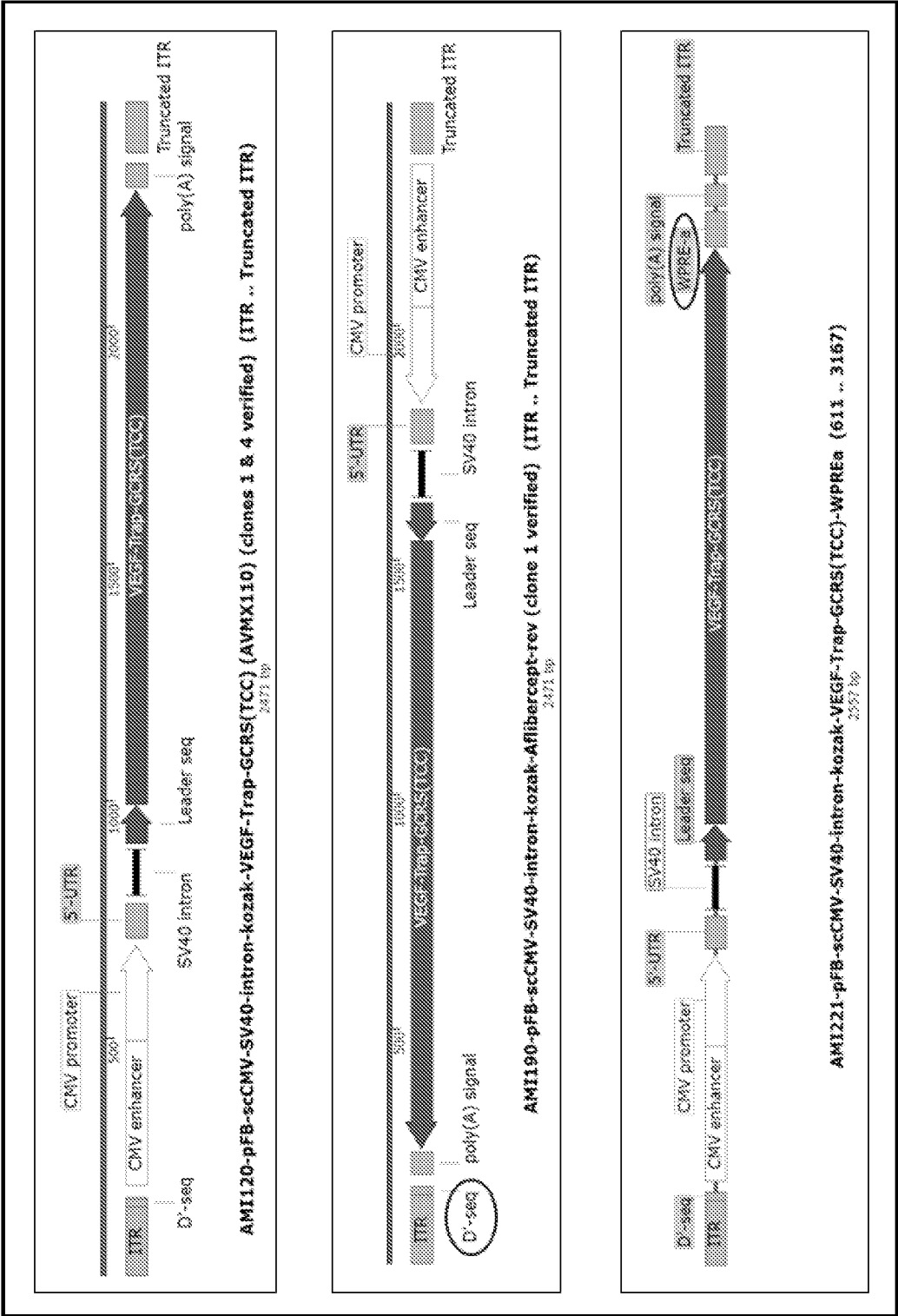


Fig. 28B

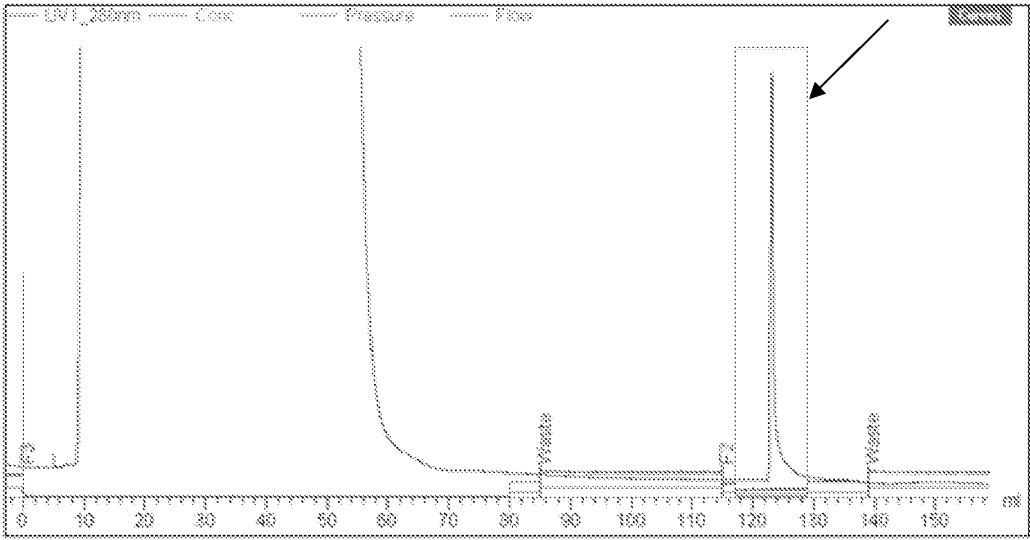


Fig. 28C

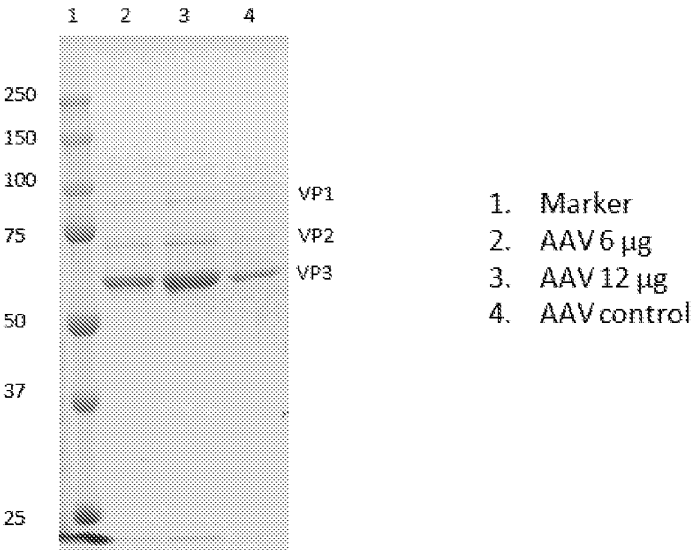


Fig. 28D

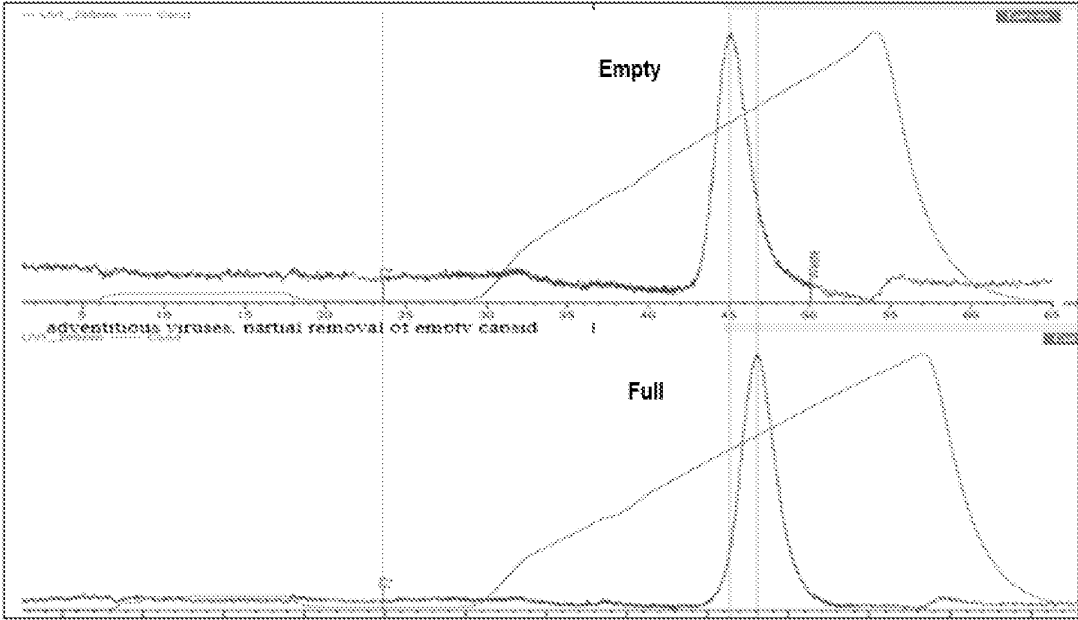


Fig. 28E

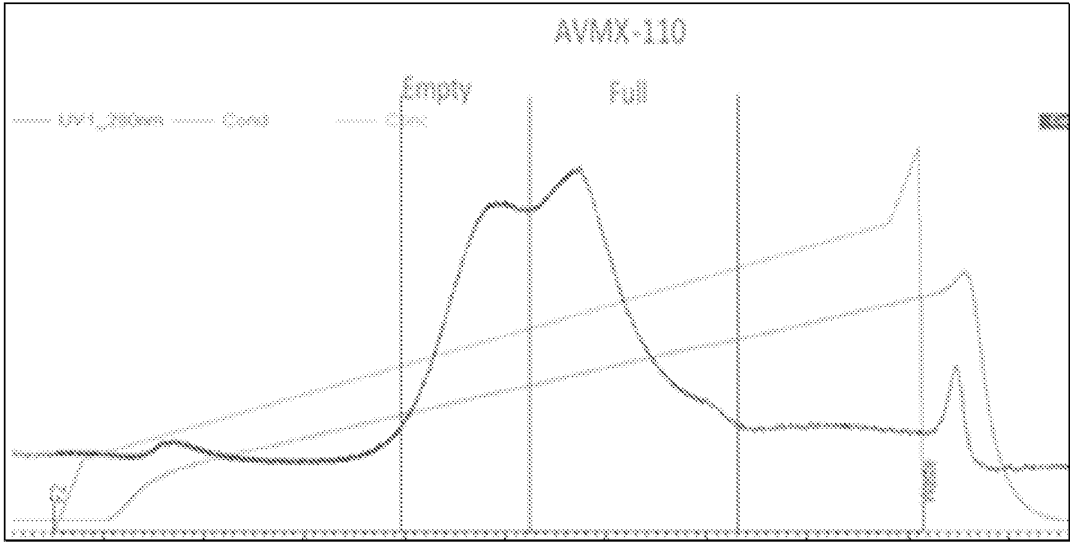


Fig. 28F

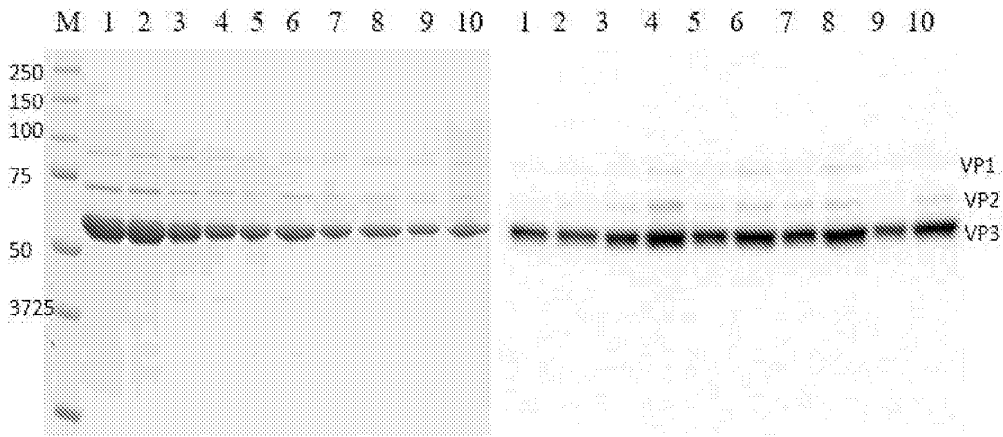


Fig. 28G

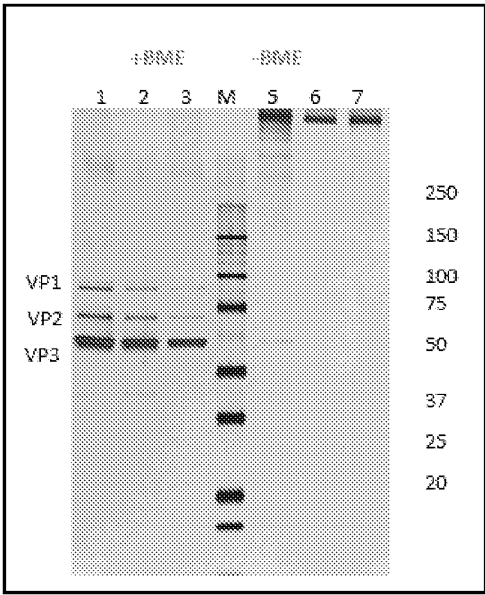
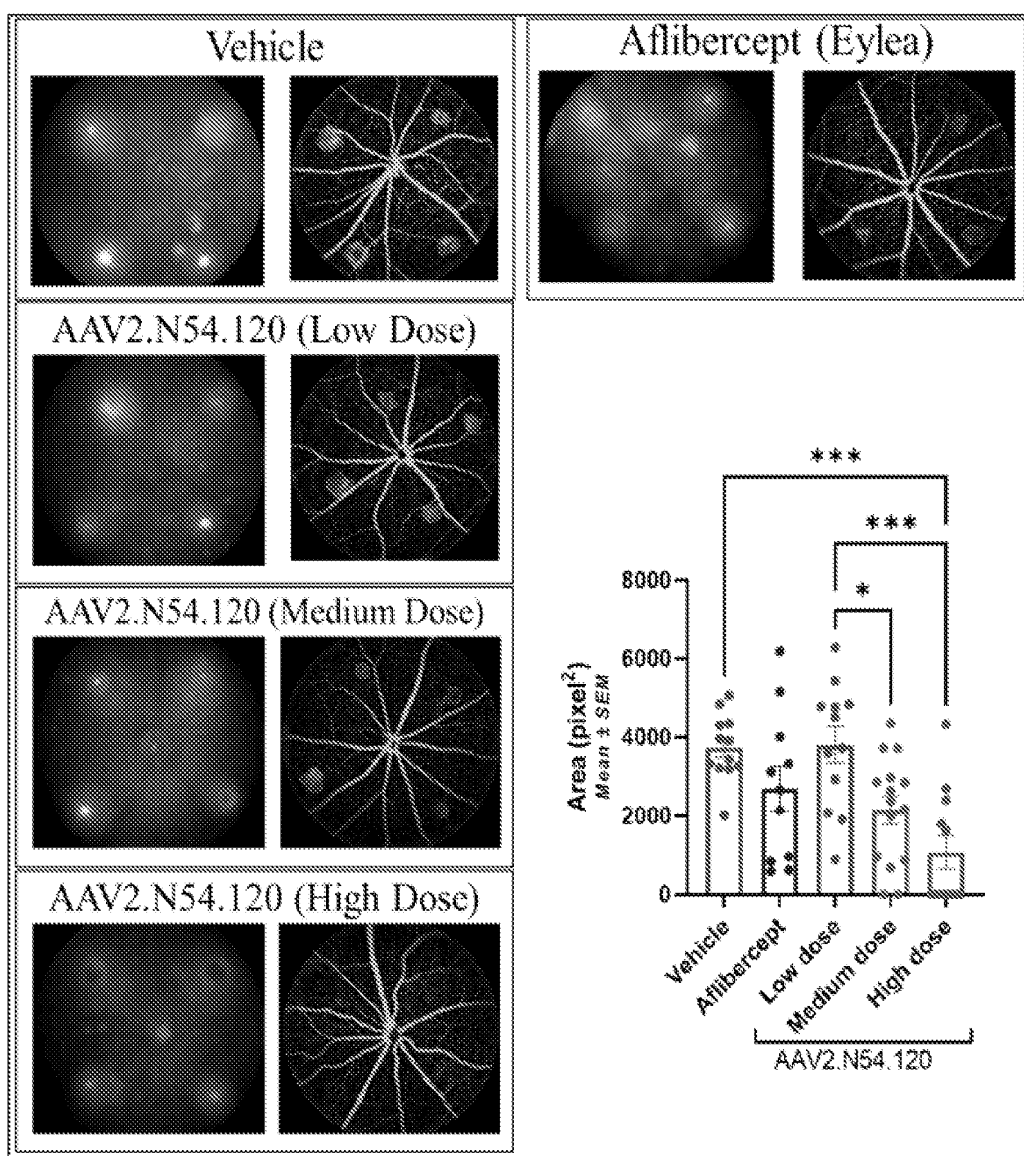


Fig. 29

One-way ANOVA followed by Tukey's multiple comparison (* = 0.0332; *** = 0.0002)

Fig. 30

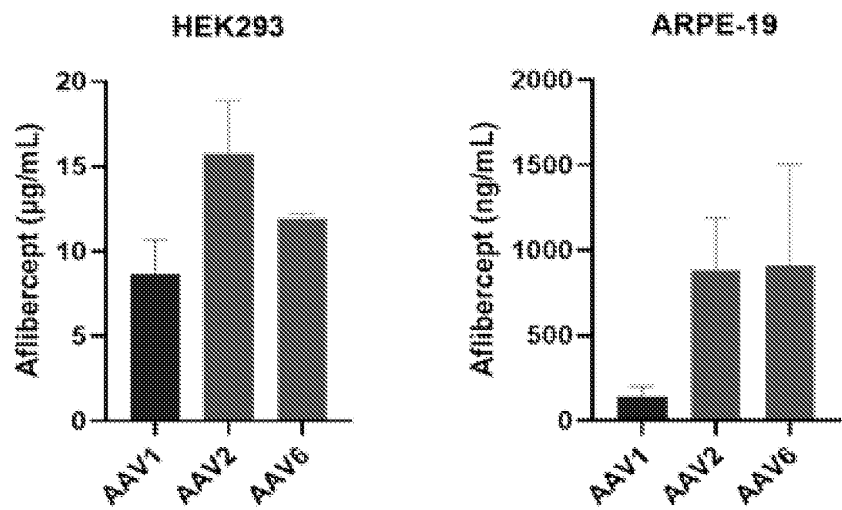


Table 3: Comparing expression level of Aflibercept in HEK293 and ARPE-19 cells

HEK293	Aflibercept (ug/mL)
AAV1	8.7 ± 3.5
AAV2	15.8 ± 5.3
AAV6	11.9 ± 0.5

ARPE-19	Aflibercept (ng/mL)
AAV1	142.1 ± 82.3
AAV2	881 ± 434.7
AAV6	908.4 ± 842.1

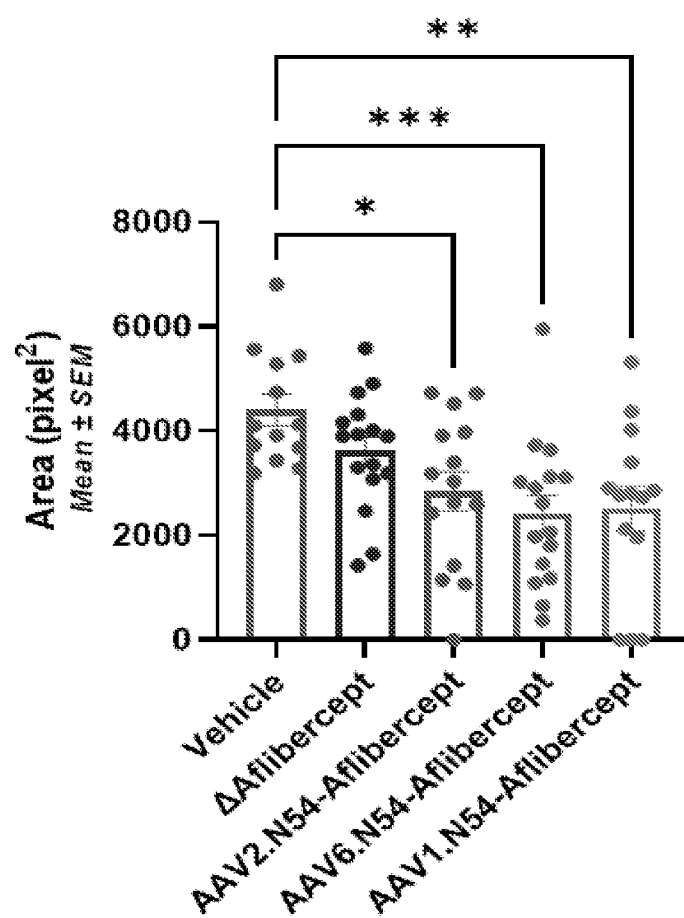
Fig. 31

Fig. 32

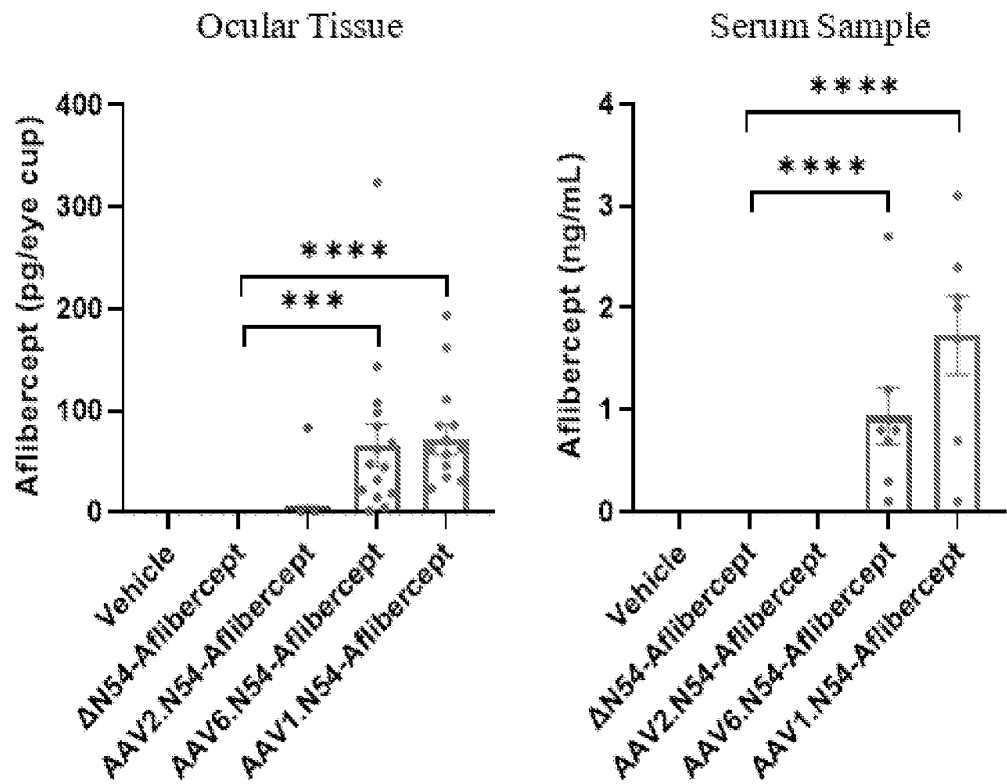


Fig. 33

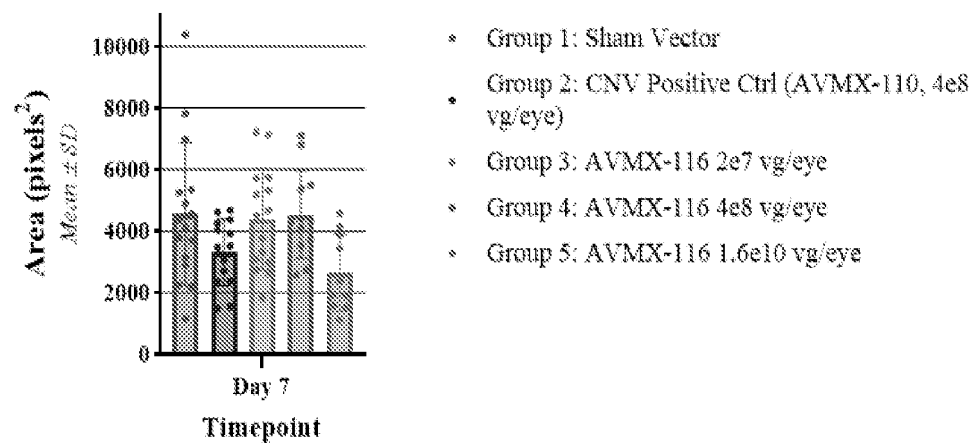


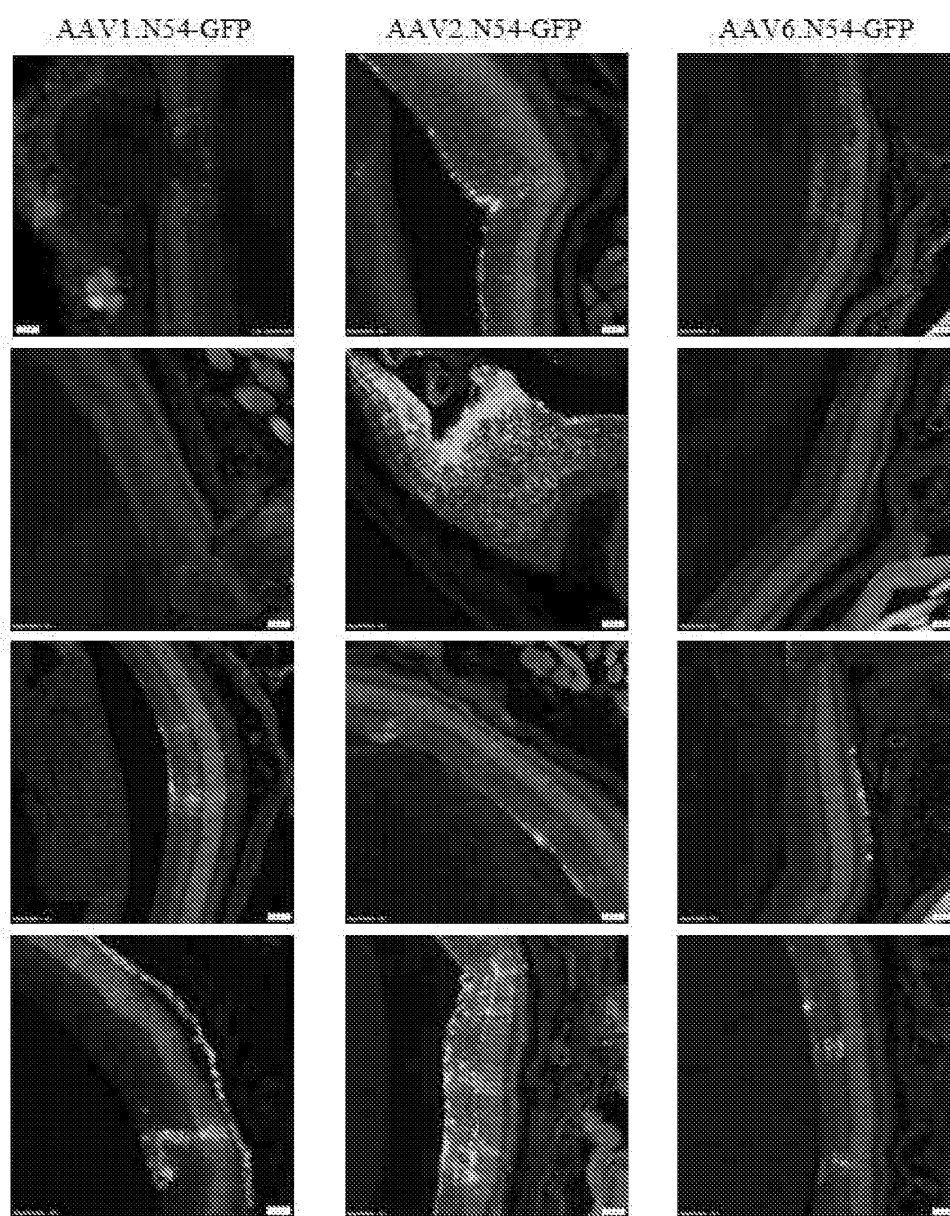
Fig. 34

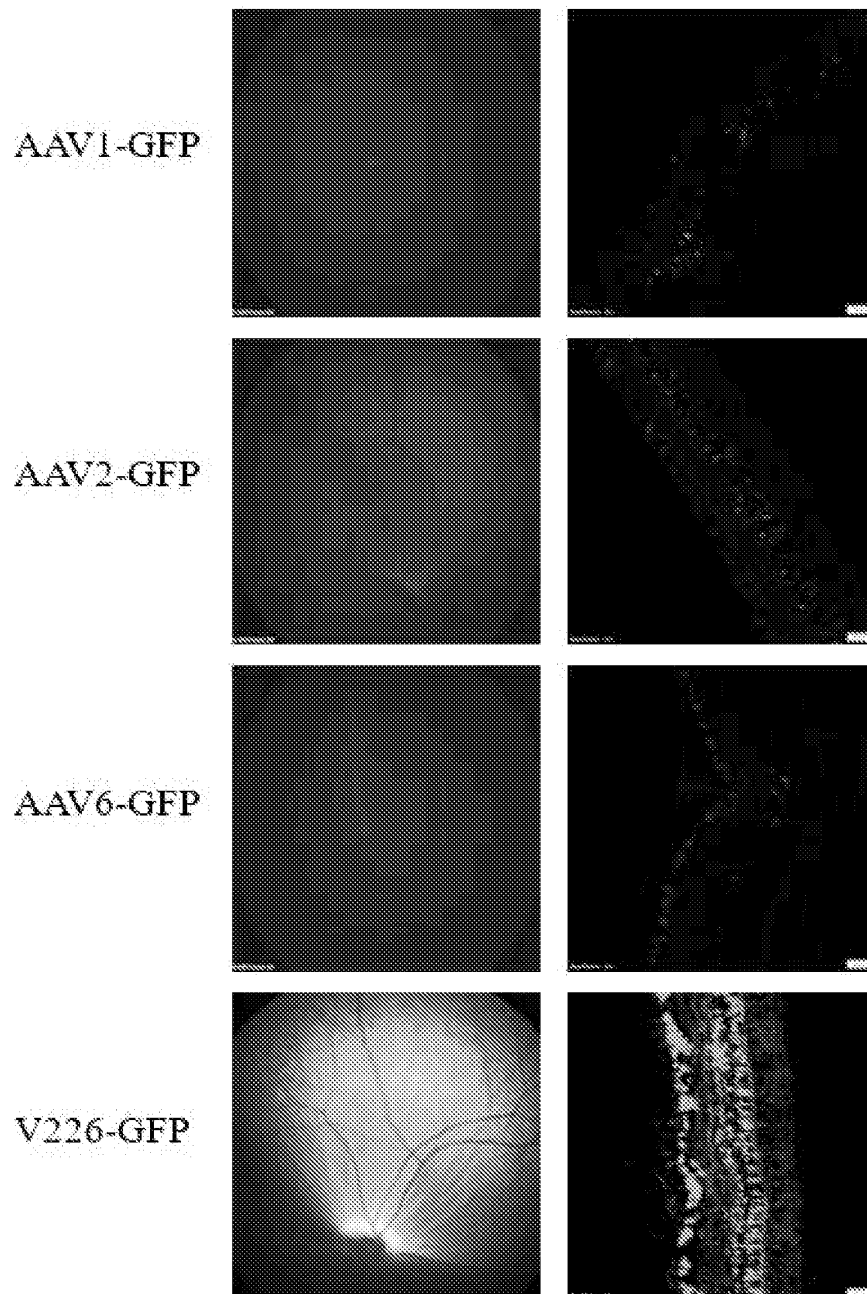
Fig. 35

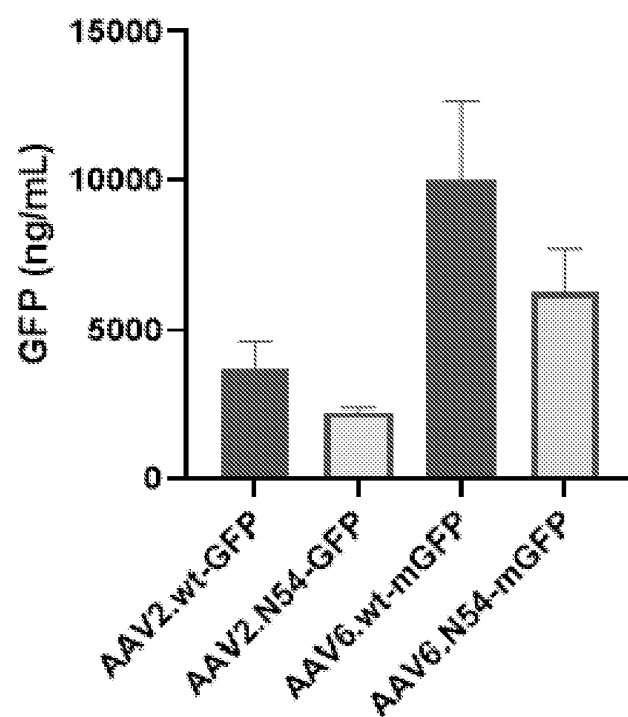
Fig. 36

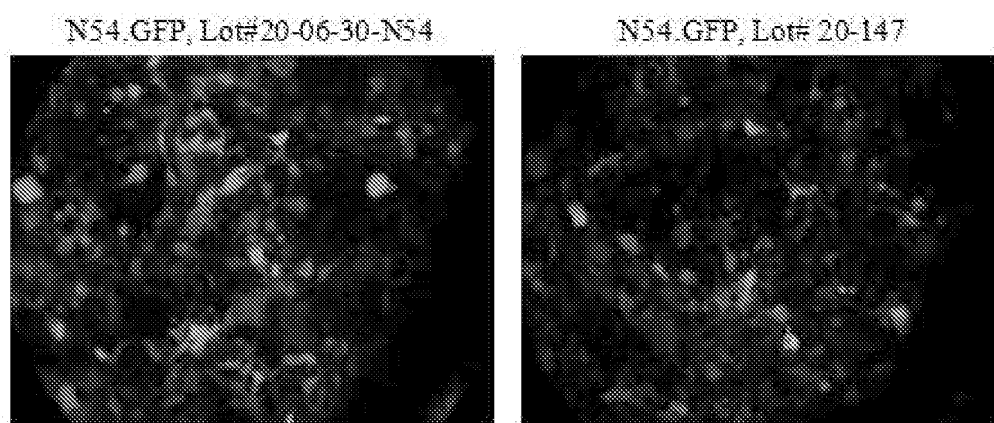
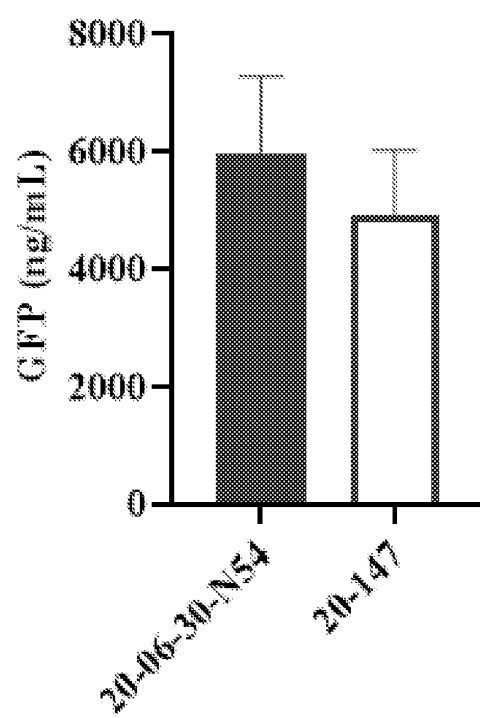
Fig. 37A**Fig. 37B**

Fig. 38A

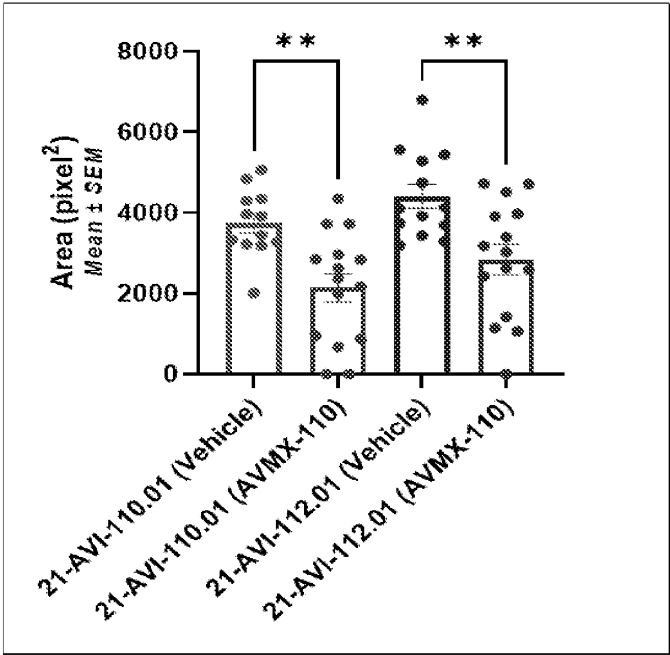


Fig. 38B

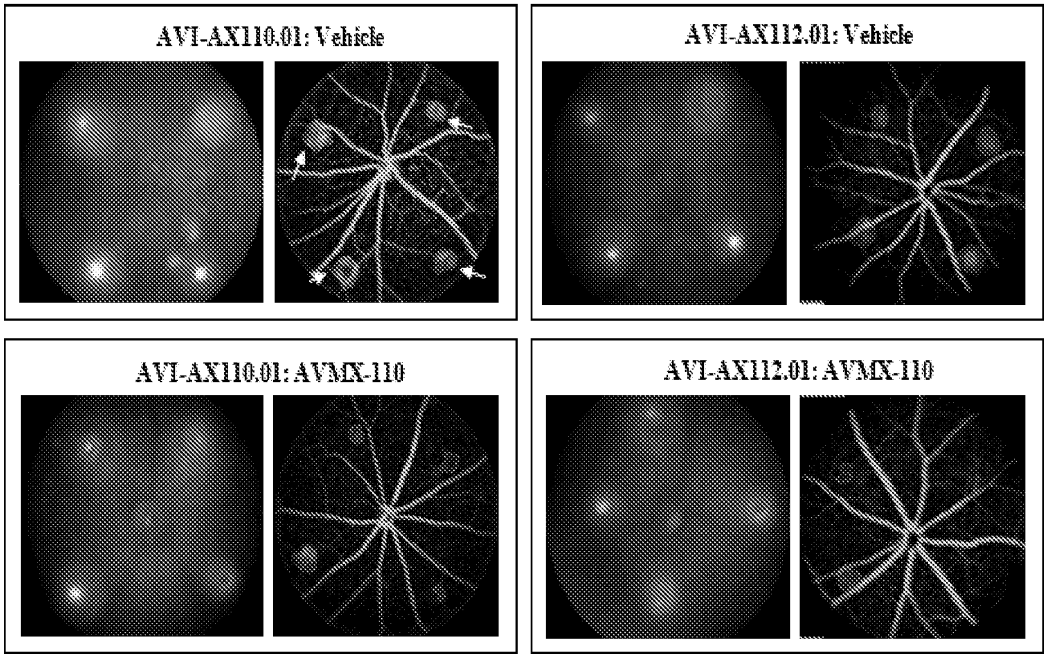


Fig. 39A

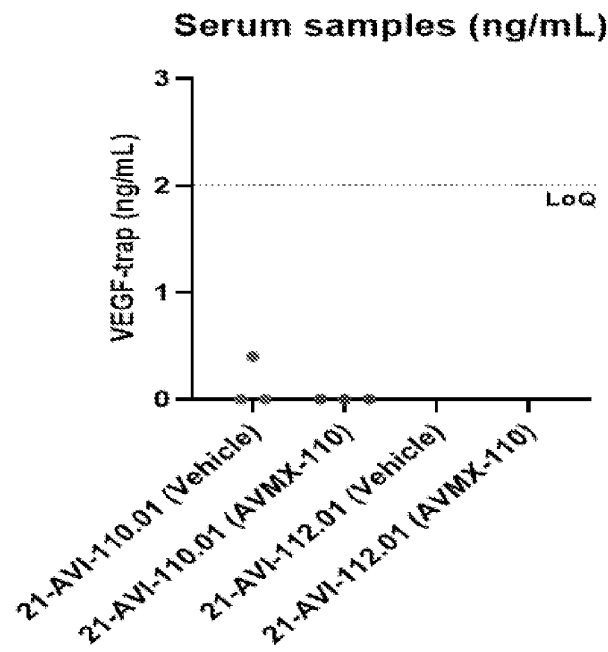


Fig. 39B

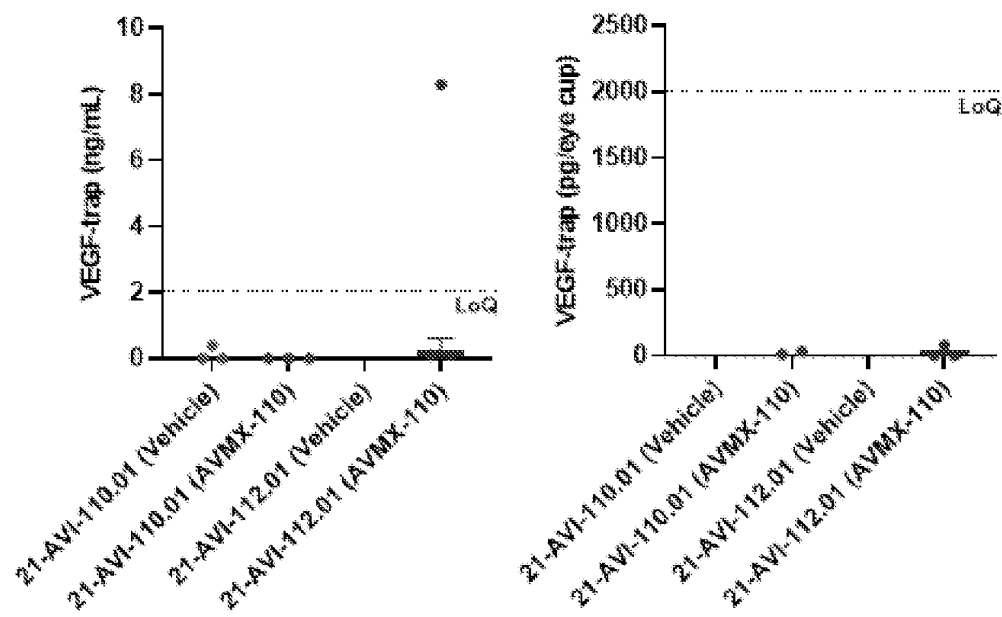


Fig. 40A

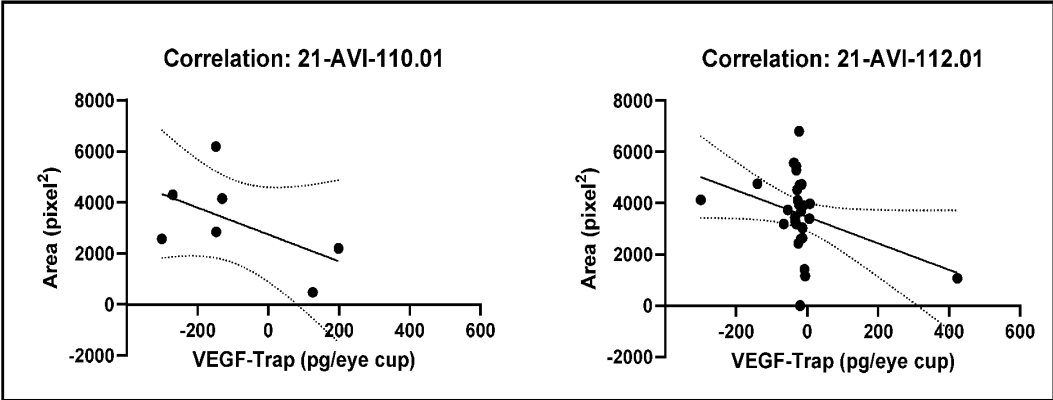


Fig. 40B

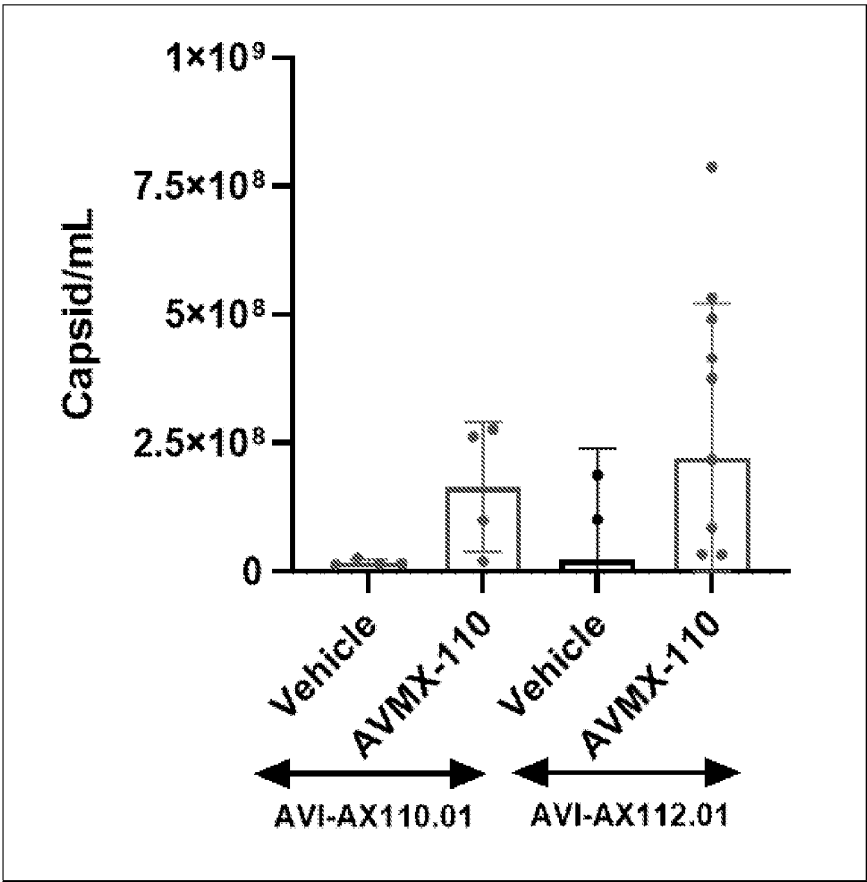


Fig. 41A

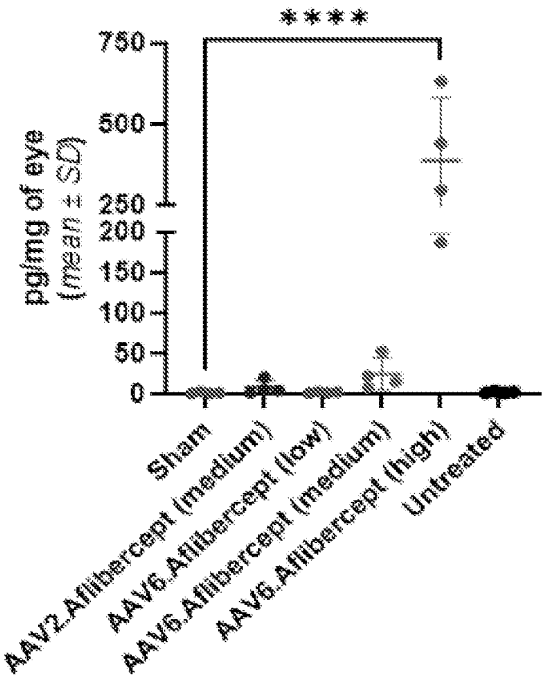


Fig. 41B

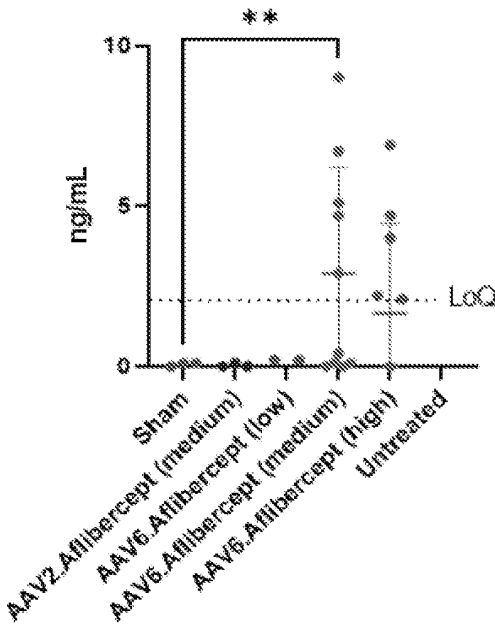


Fig. 42

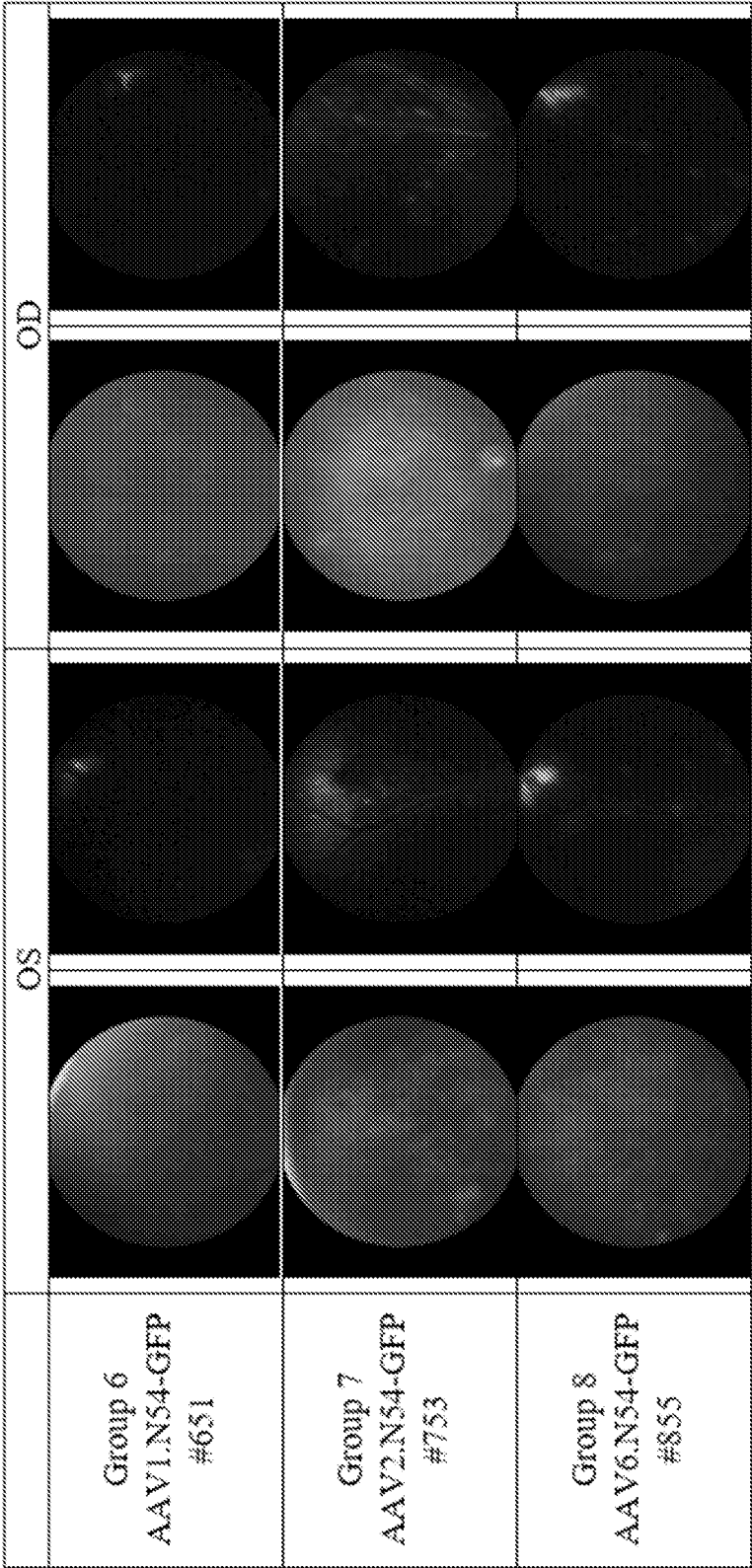


Fig. 43

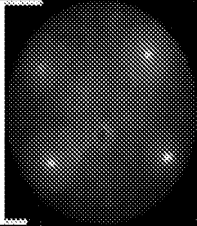
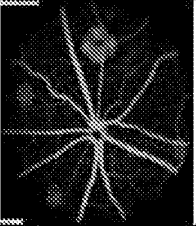
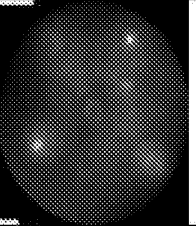
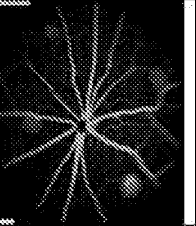
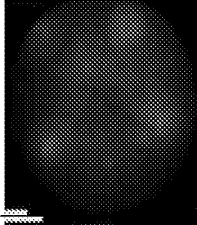
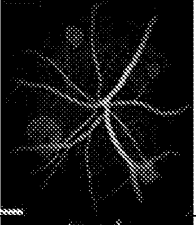
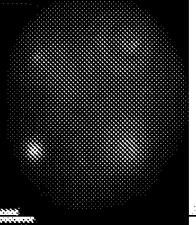
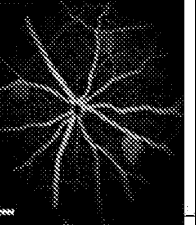
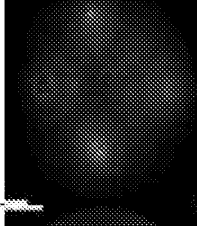
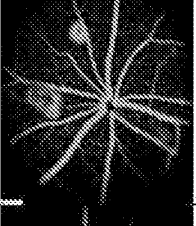
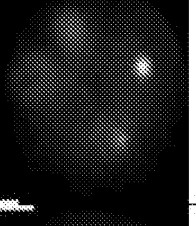
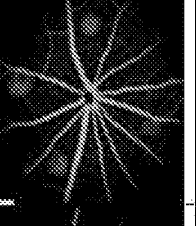
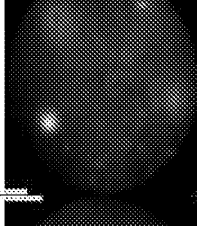
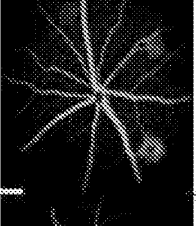
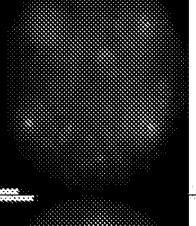
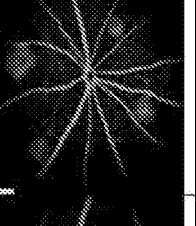
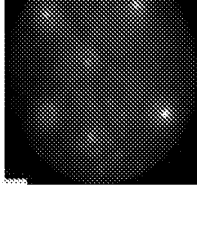
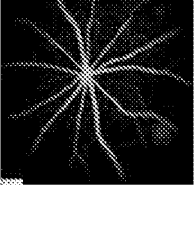
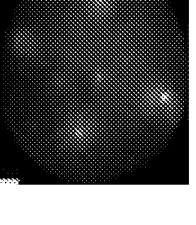
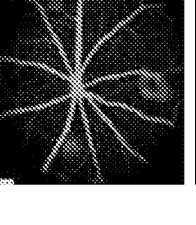
Group #	OS		OD	
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Group 2 AVMX-110 #215				
Group 3 AVMX-116 2e7 vg/eye #325				
Group 4 AVMX-116 4e8 vg/eye #435				
Group 5 AVMX-116 1.6e10 vg/eye #547				

Fig. 44

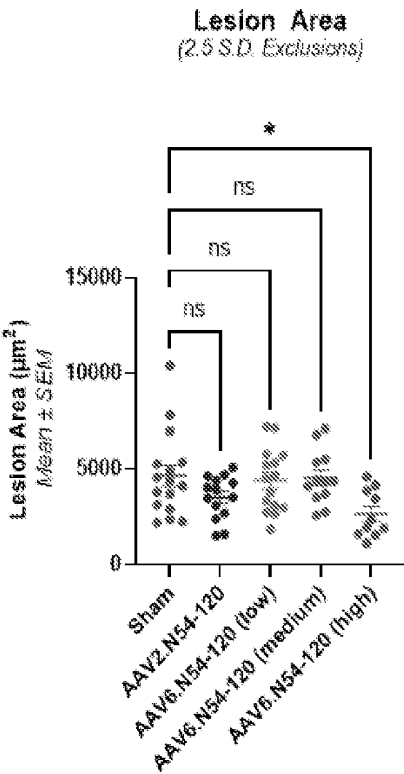


Fig. 45

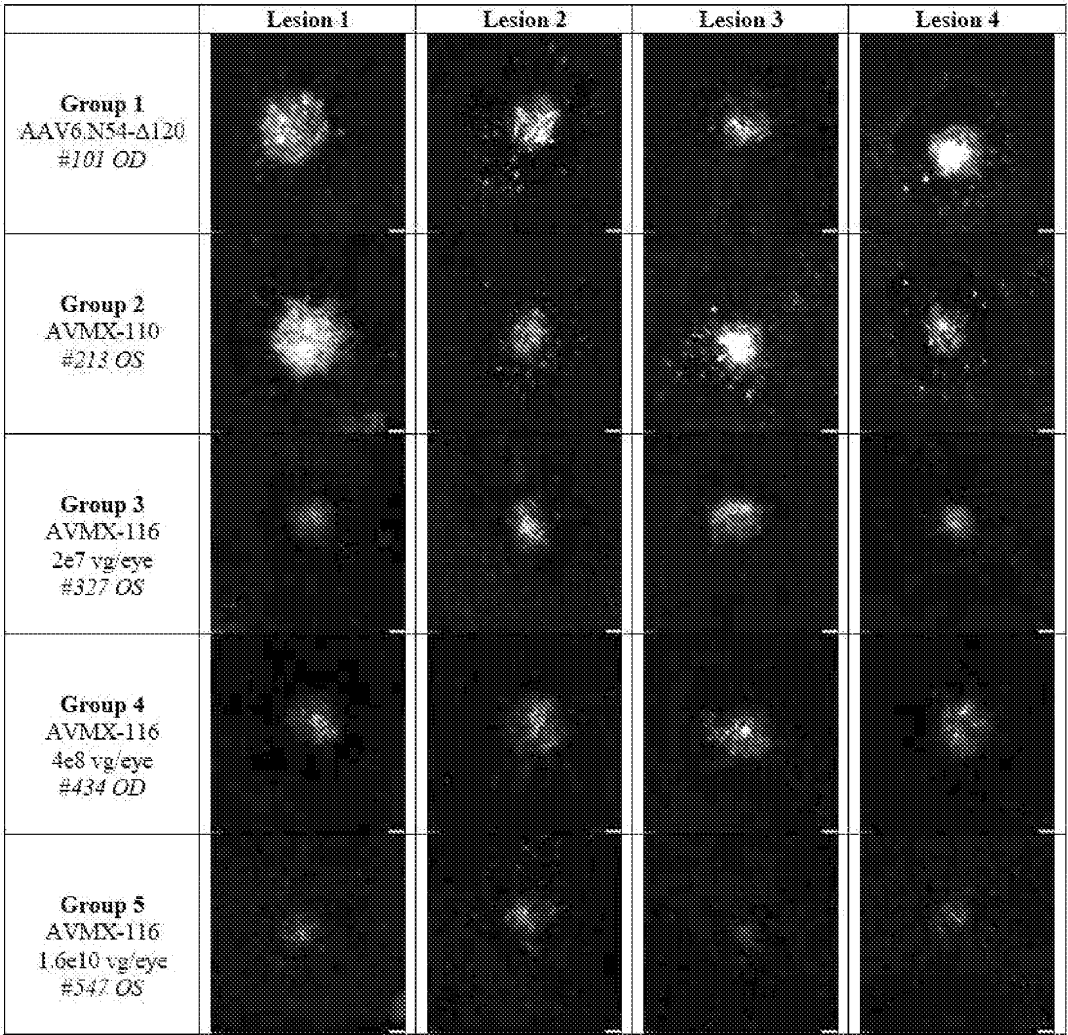


Fig. 46

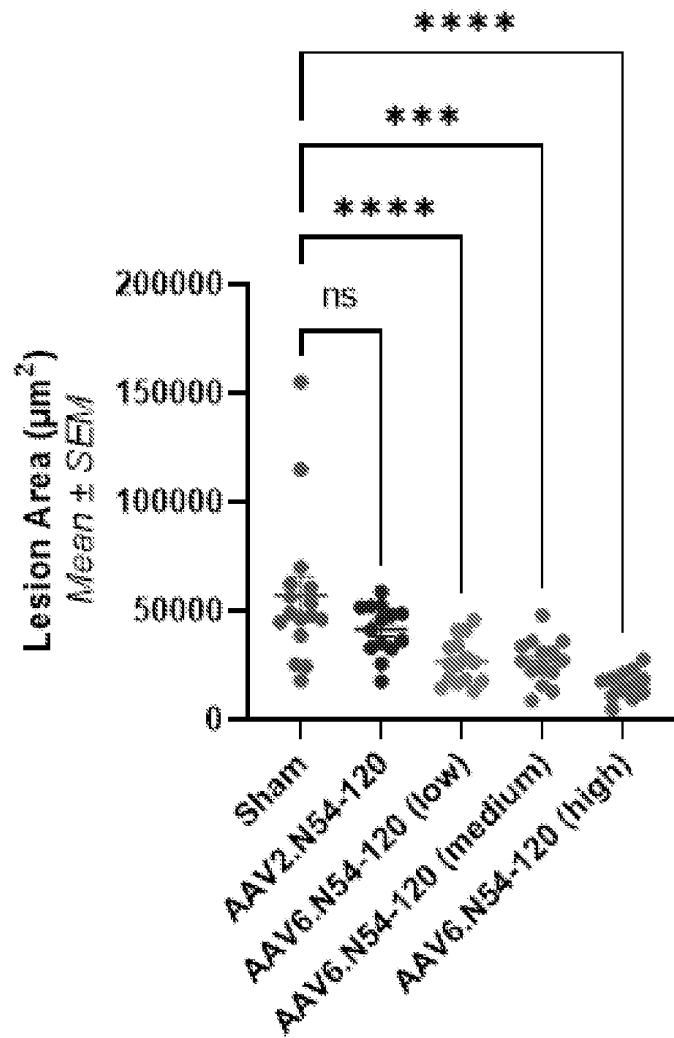


Fig. 47

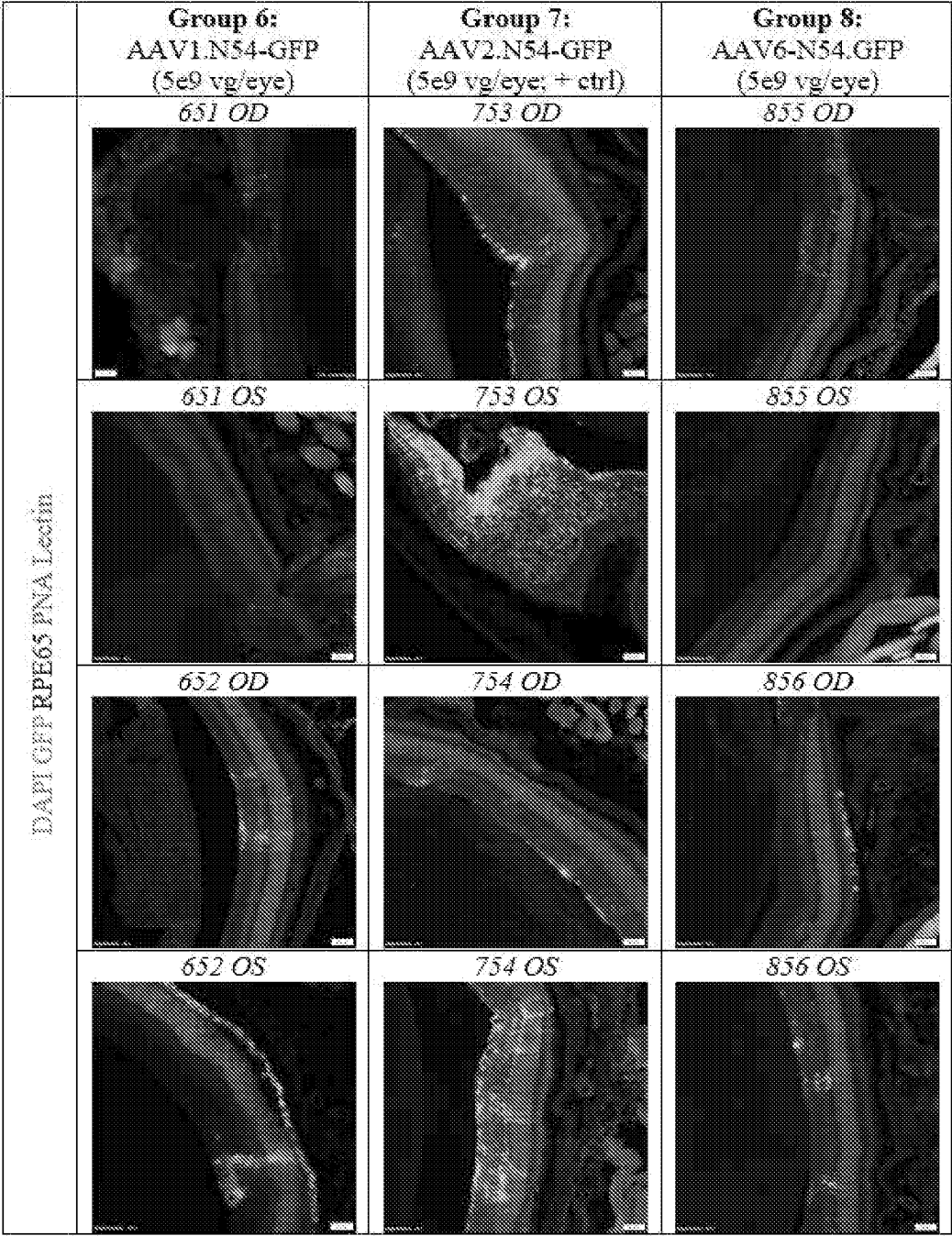


Fig. 48A

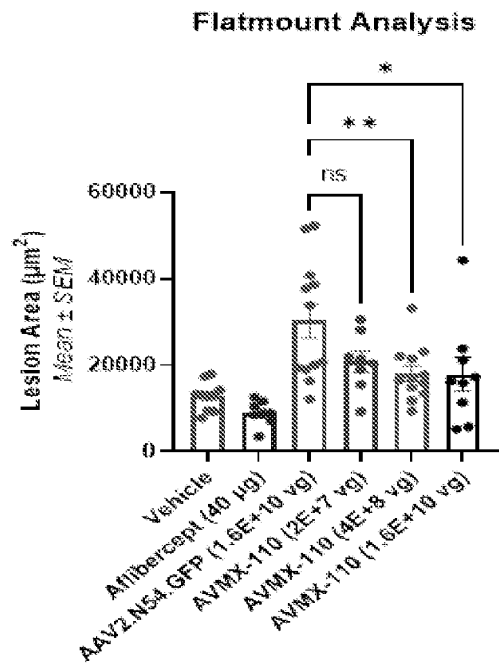


Fig. 48B

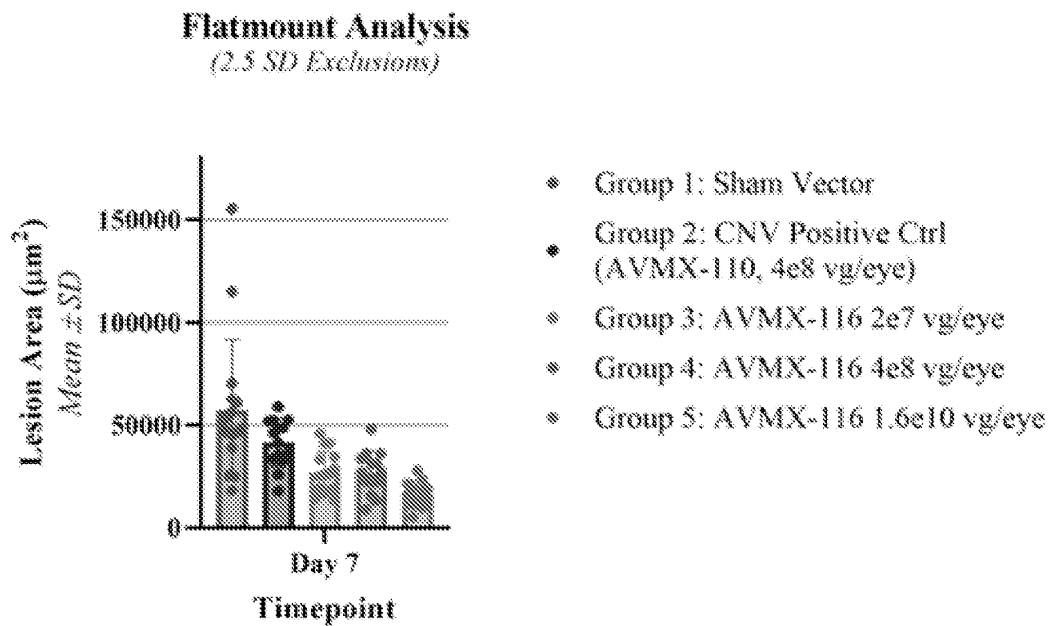


Fig. 49A

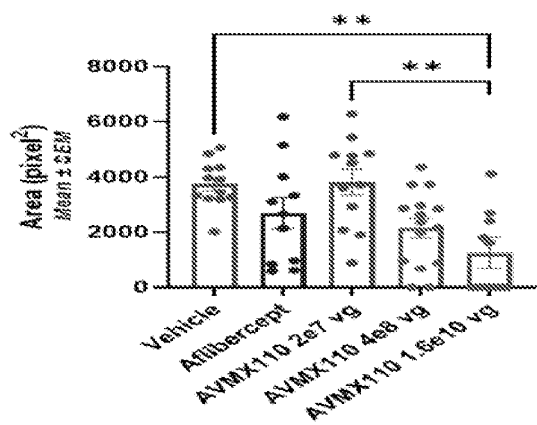


Fig. 49B

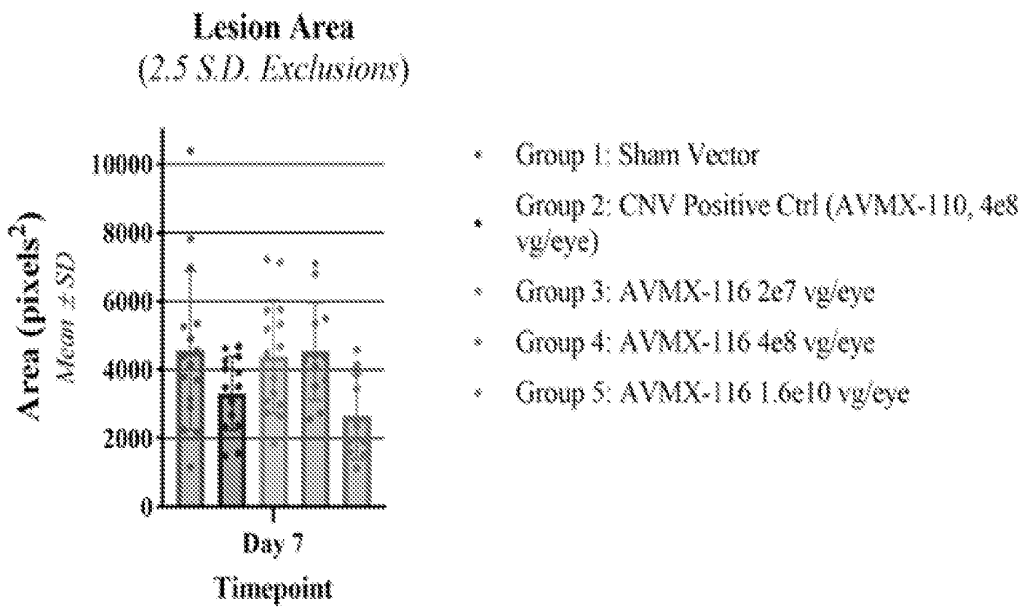


Fig. 50

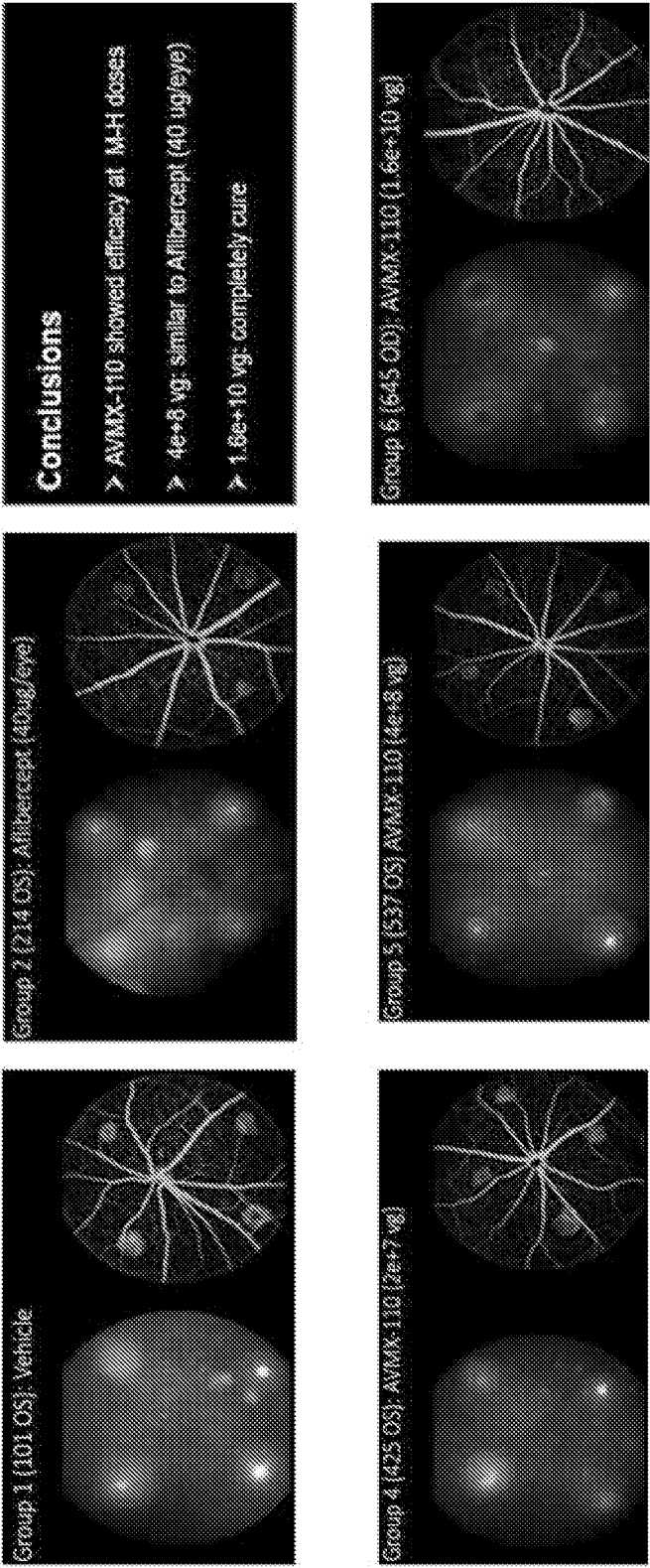


Fig. 51A

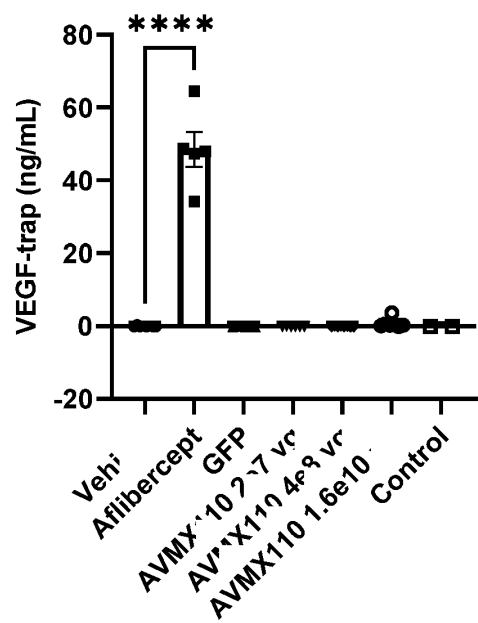


Fig. 51B

