

Fig. 1A

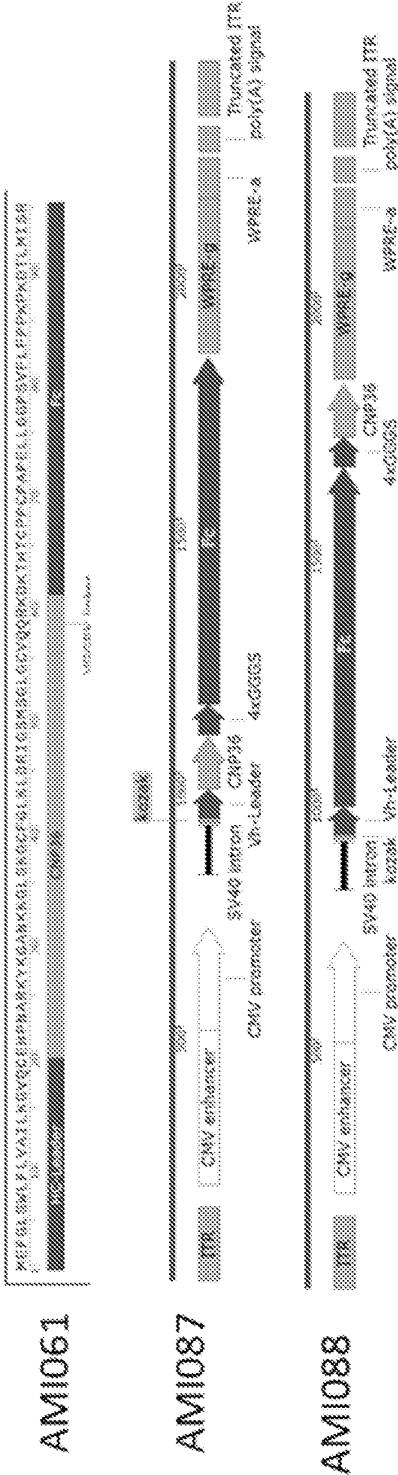
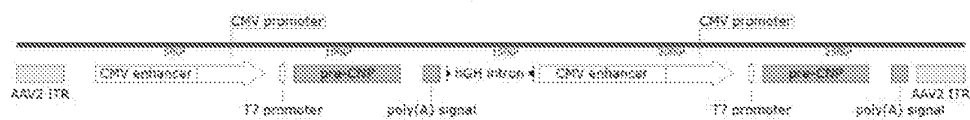


Fig. 1B



Fig. 1C

- AMI012-pFB-CMV-pre-CNP-CMV-pre-CNP



- AMI014-pFB-CMV-preCNP-Fc

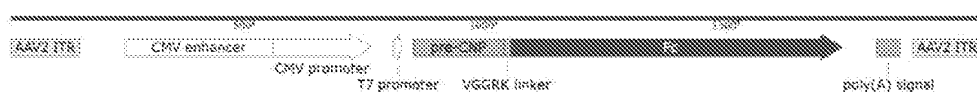
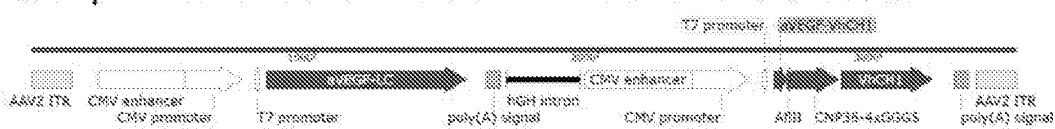


Fig. 1D

- AMI015-pFB-CMV-aVEGF-LC-CMV-HC-leader-CNP36-CH1



- AMI016-pFB-CMV-CNP36-Fab

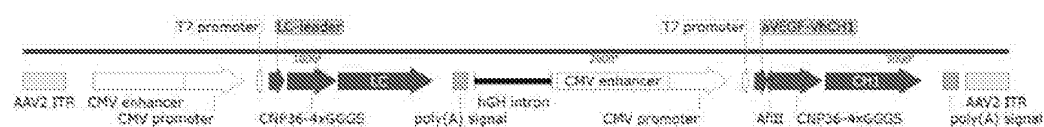
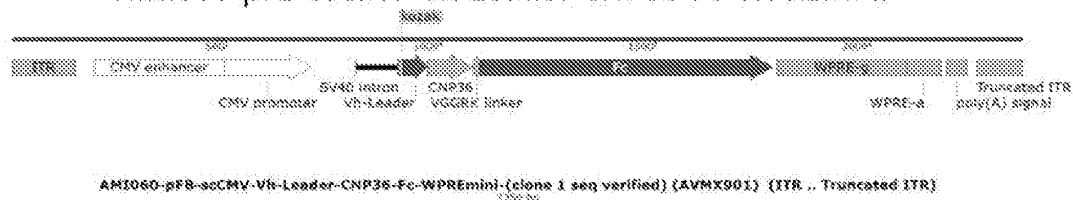


Fig. 1E

• AMI060-pFB-scCMV-Vh-Leader-CNP36-Fc-WPREmini



• AMI061-pFB-scCMV-Vh-Leader-CNP36

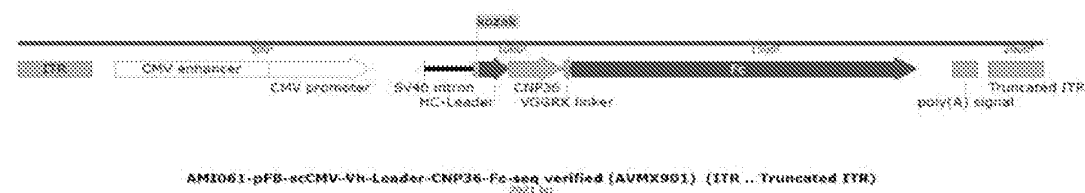
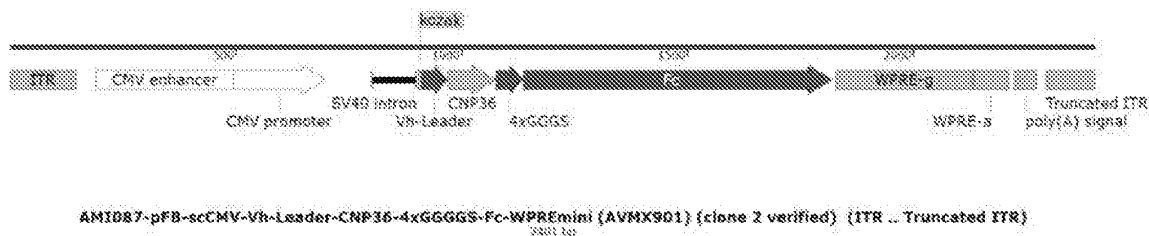


Fig. 1F

• AMI087-pFB-scCMV-Vh-Leader-CNP36-4xGGGGS-Fc-WPREmini



• AMI088-pFB-scCMV-Vh-Leader-Fc-4xGGGGS-CNP36-WPREmini

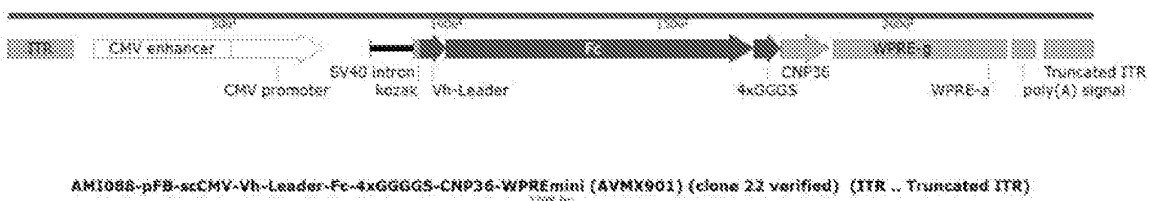


Fig. 2A

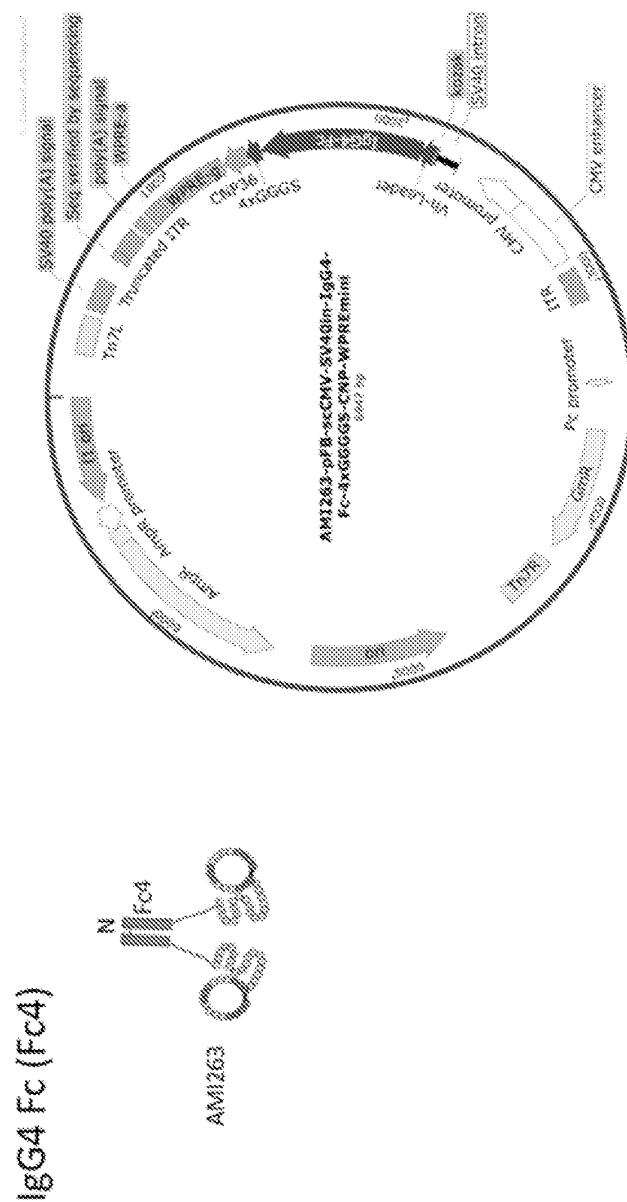


Fig. 2B

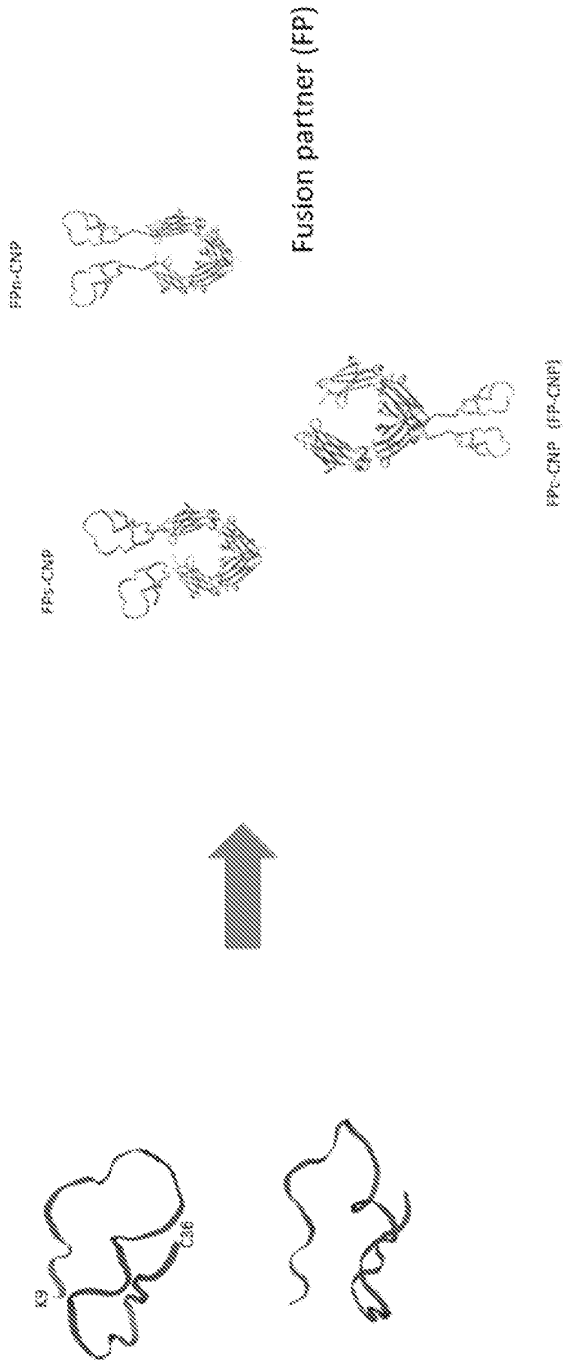


Fig. 3A

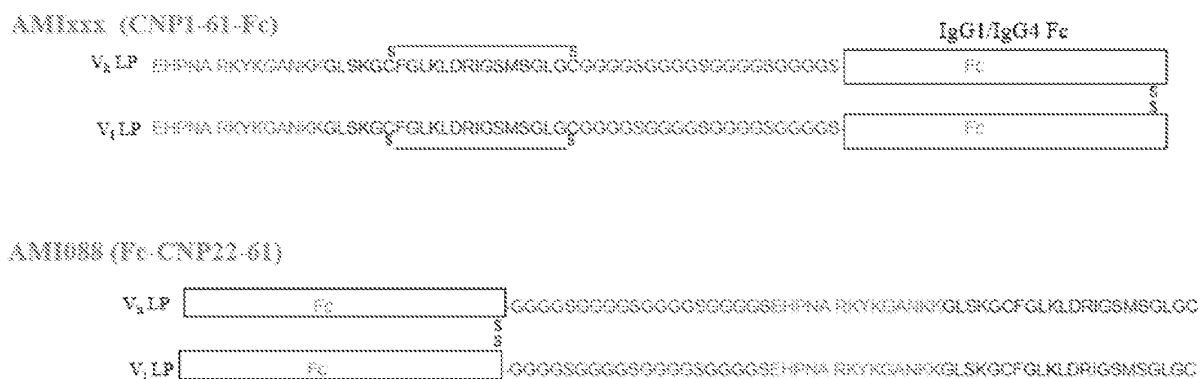


Fig. 3B

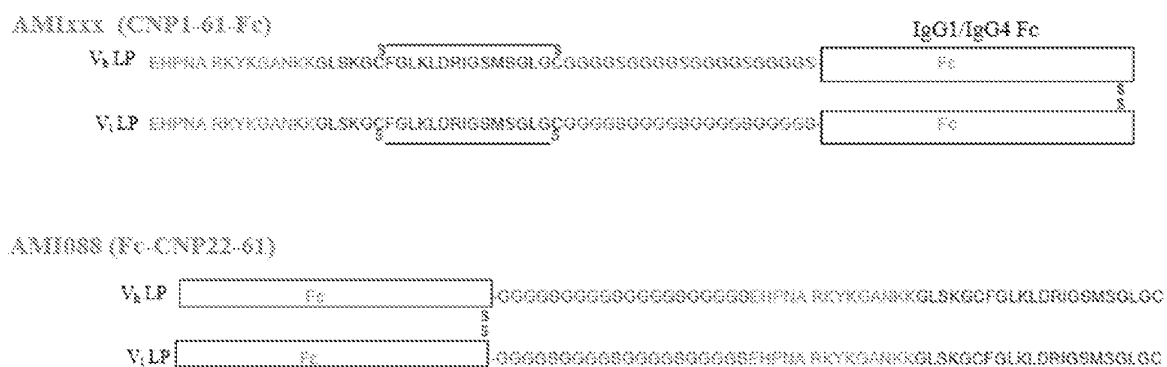


Fig. 3C



Fig. 4A

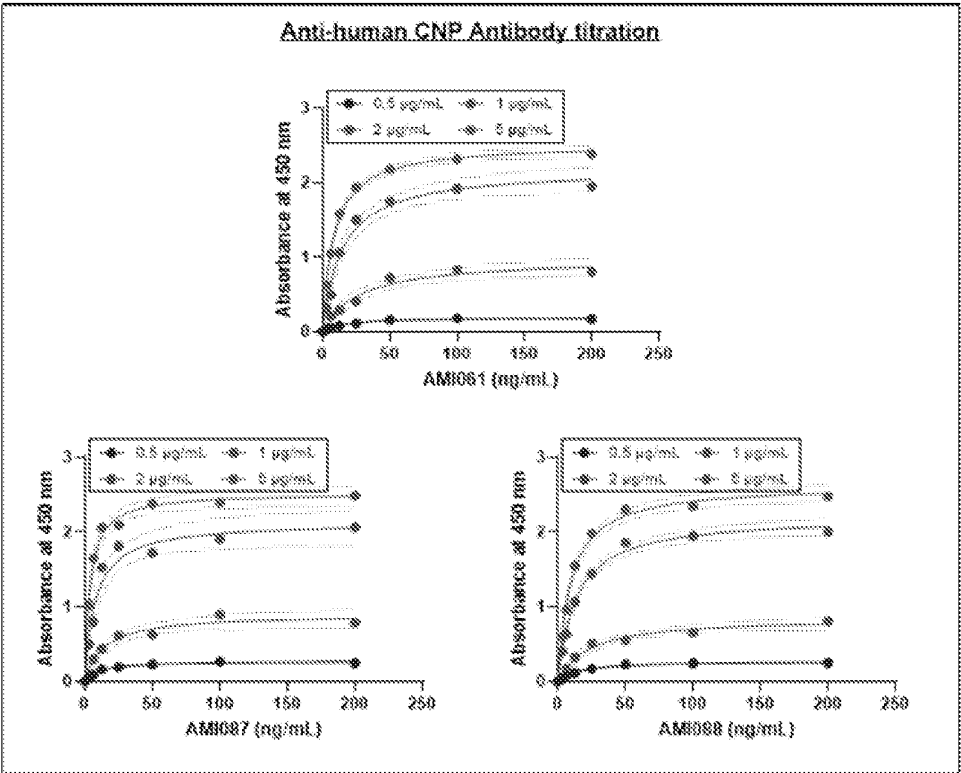


Fig. 4B

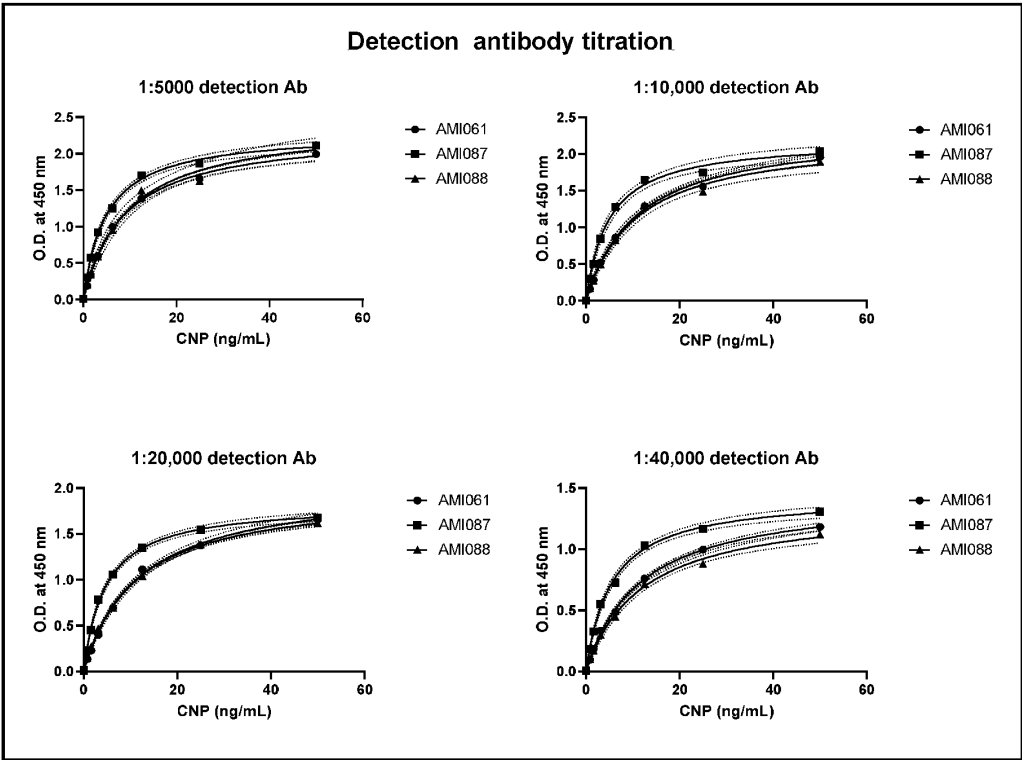


Fig. 4C

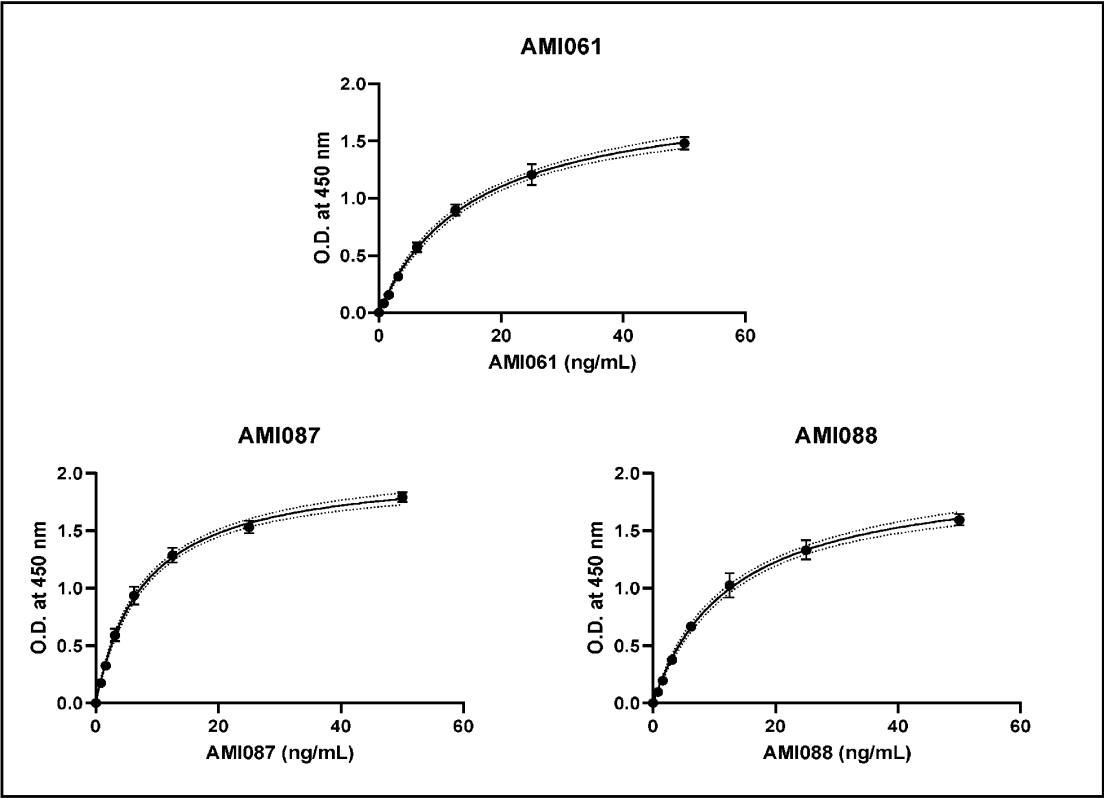


Fig. 5

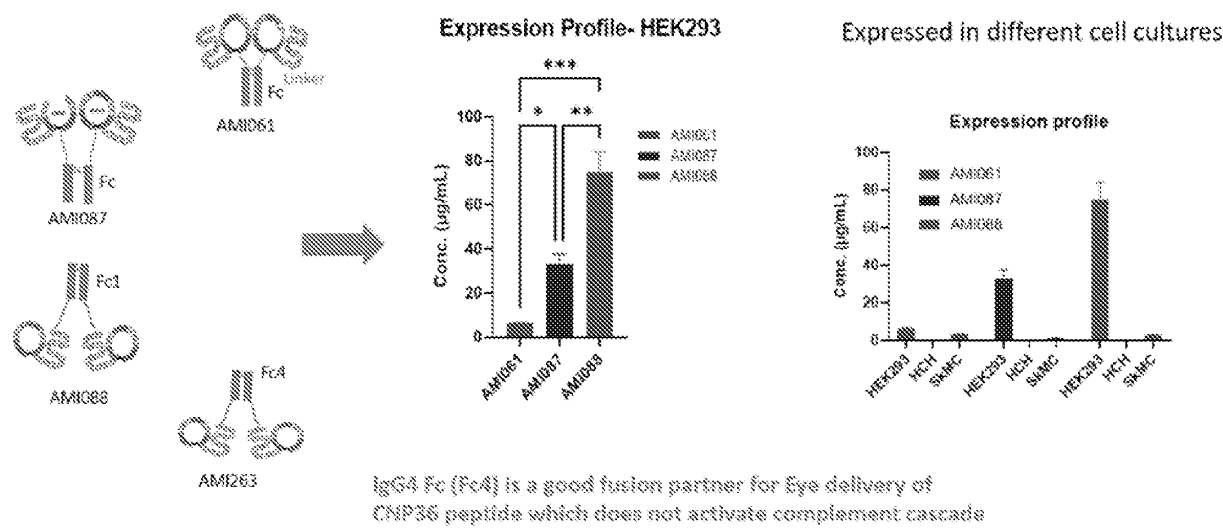


Fig. 6A

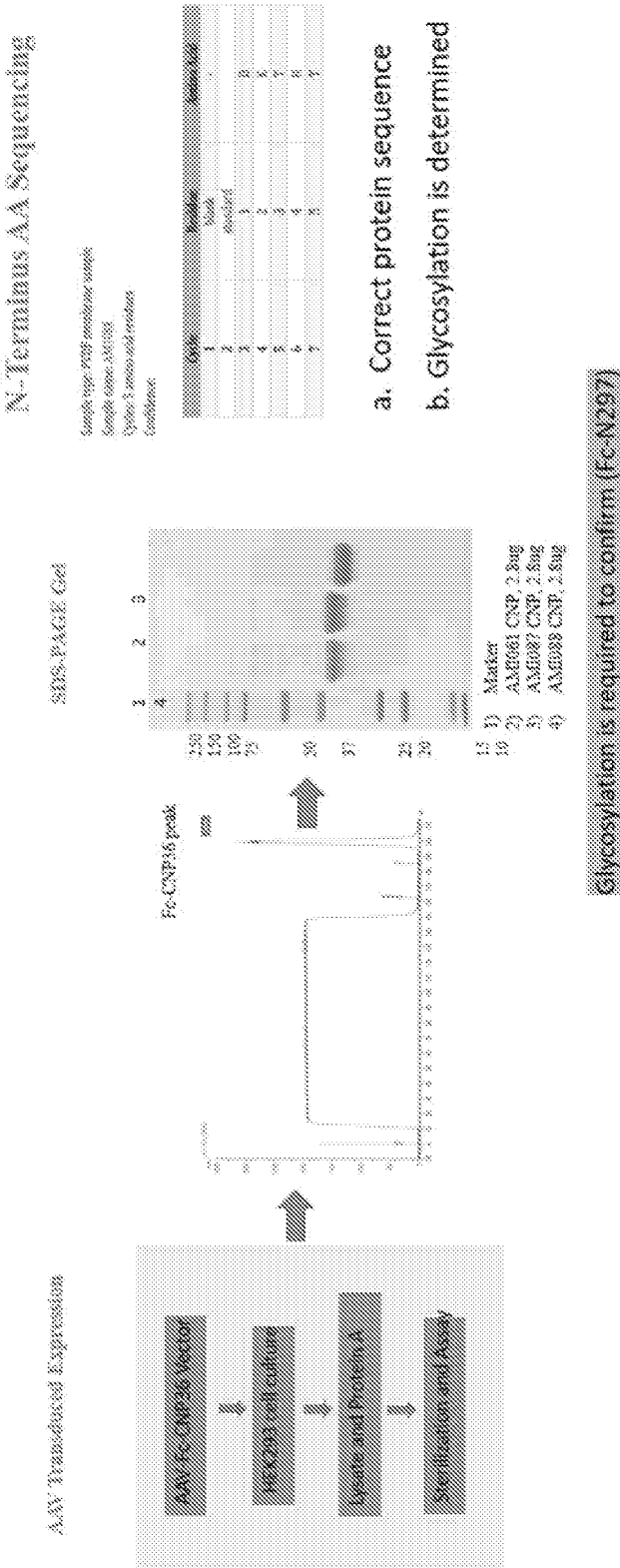


Fig. 6B

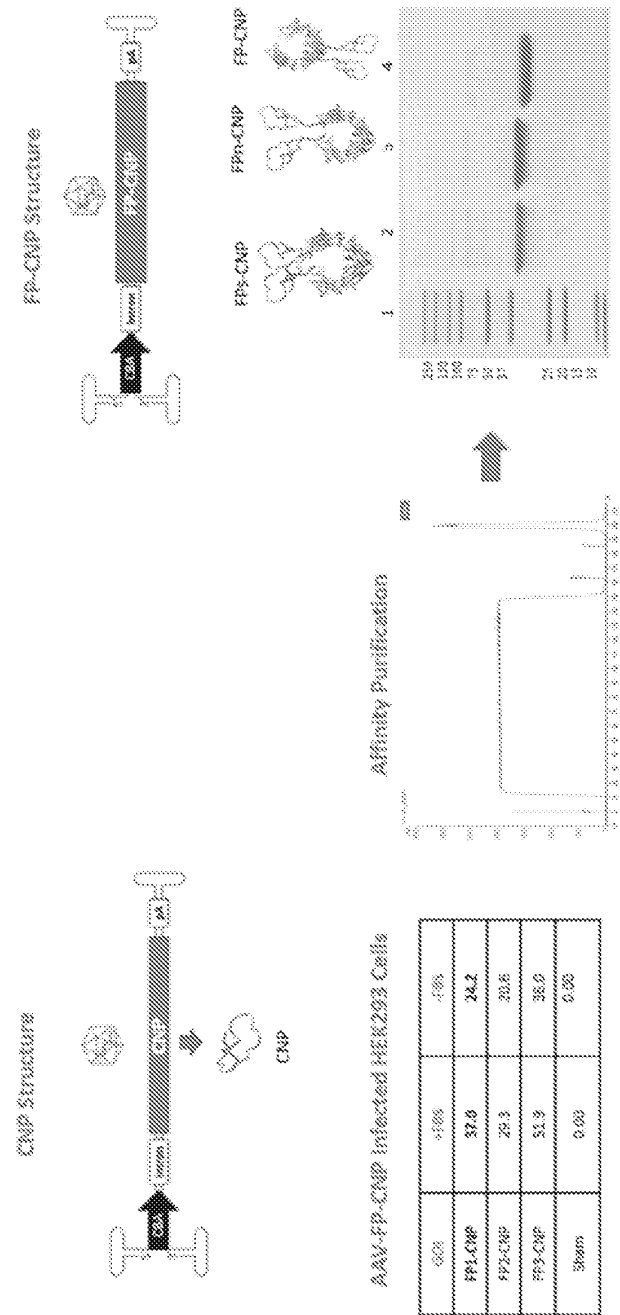


Fig. 7A

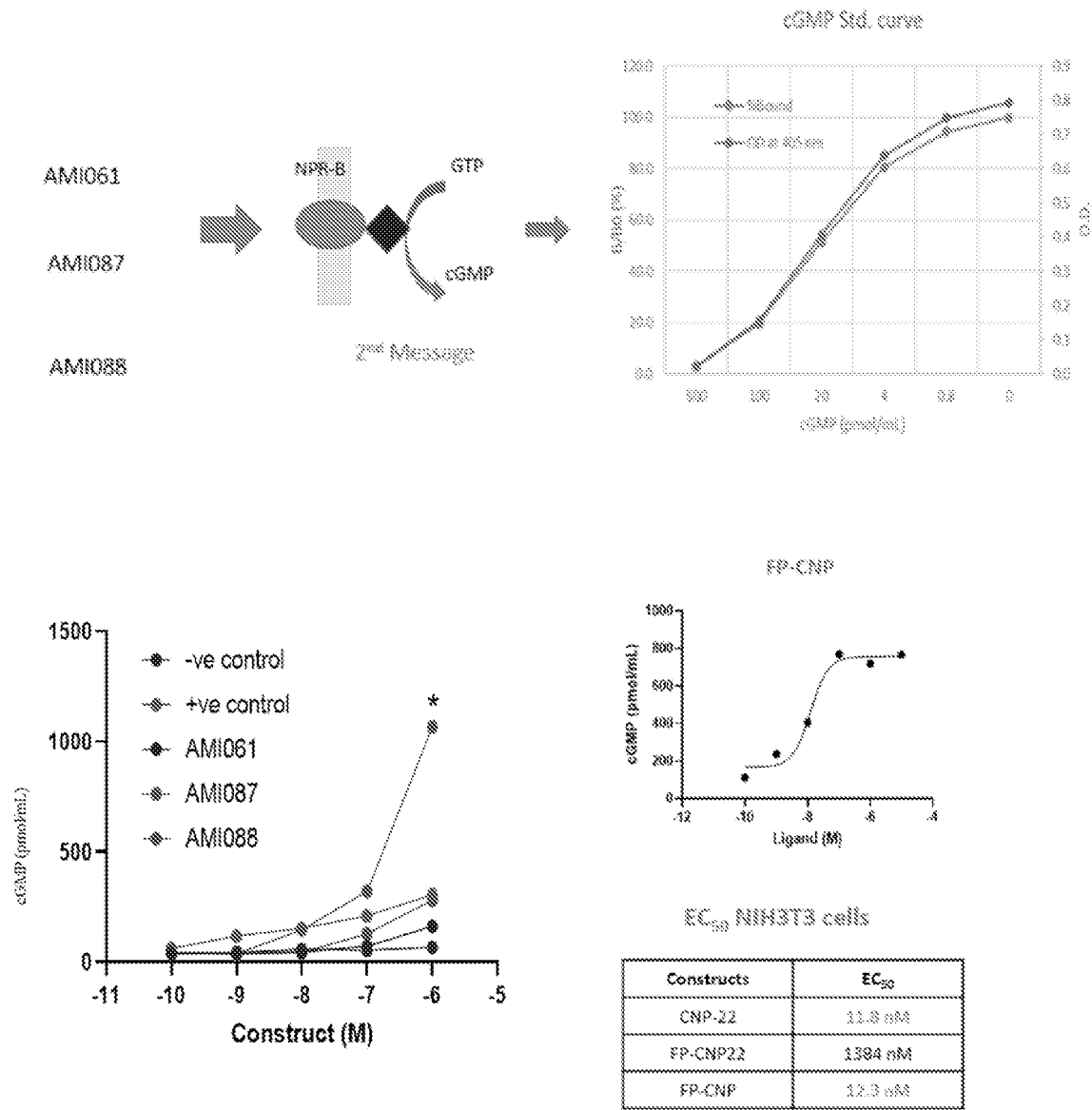


Fig. 7B

BiaCore Assay with NPR-B Protein

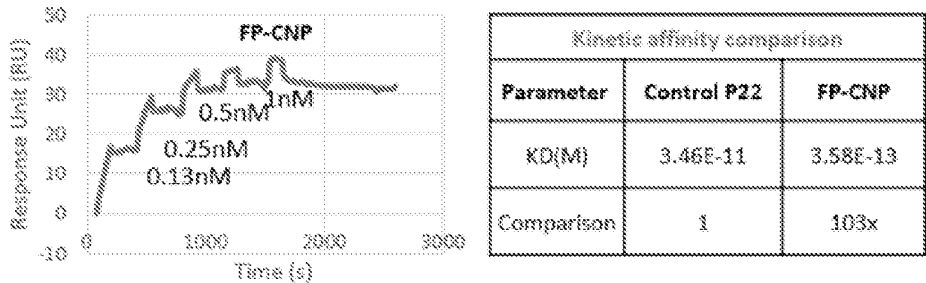


Fig. 7C

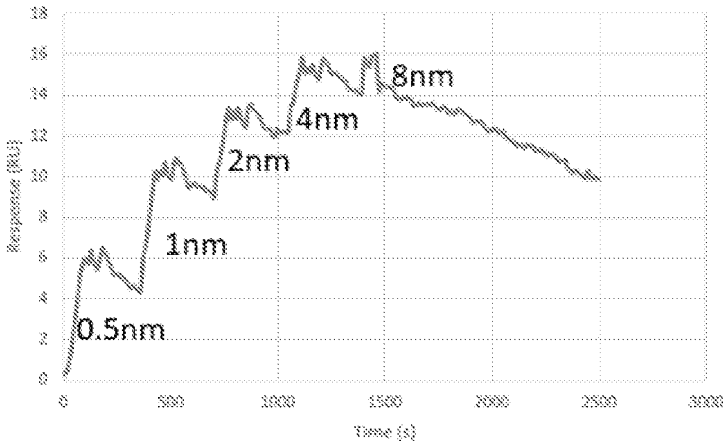


Fig. 7D

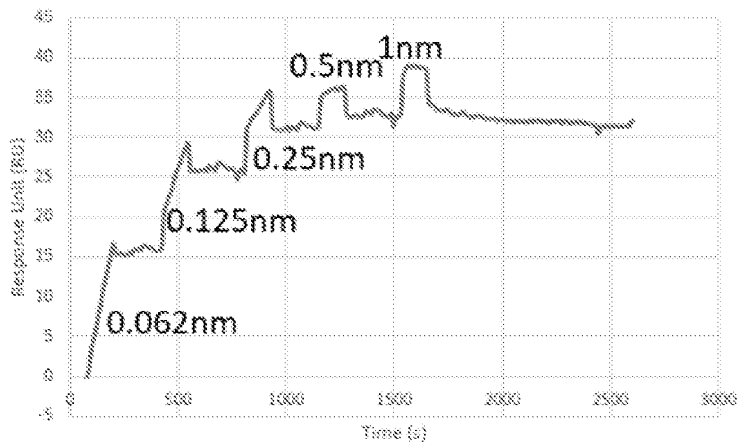


Fig. 7E

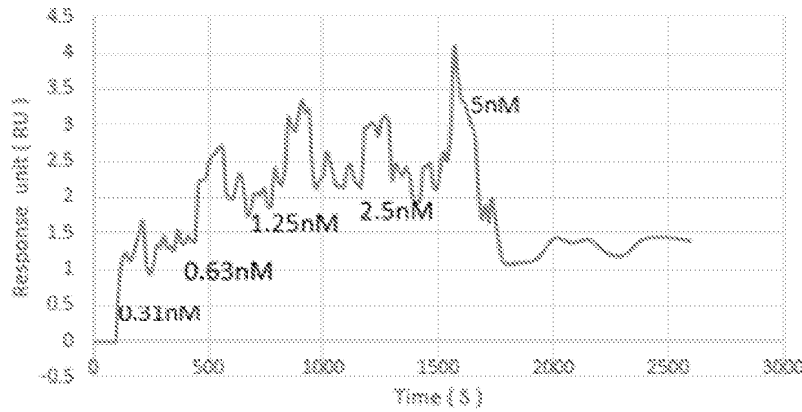


Fig. 7F

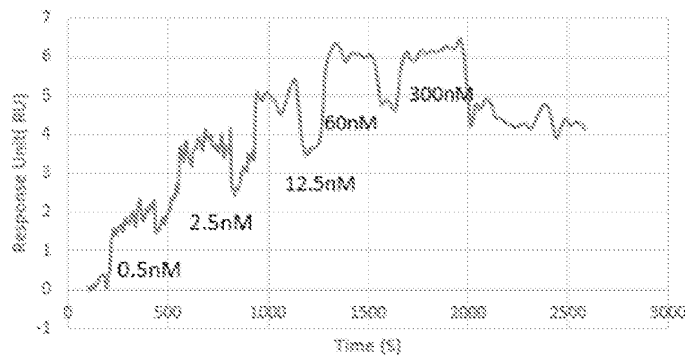


Fig. 7G

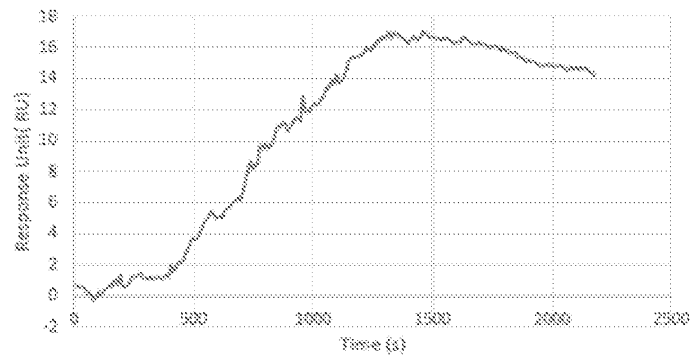


Fig. 7H

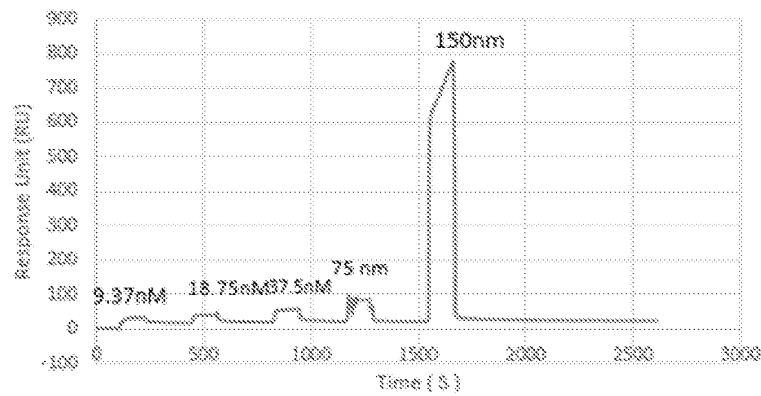
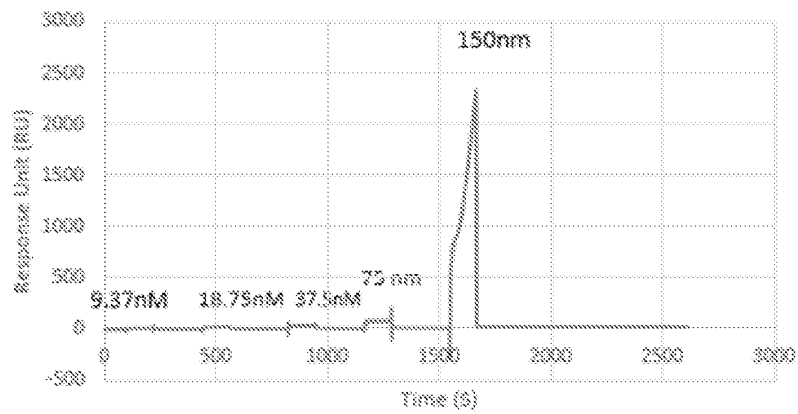


Fig. 7I



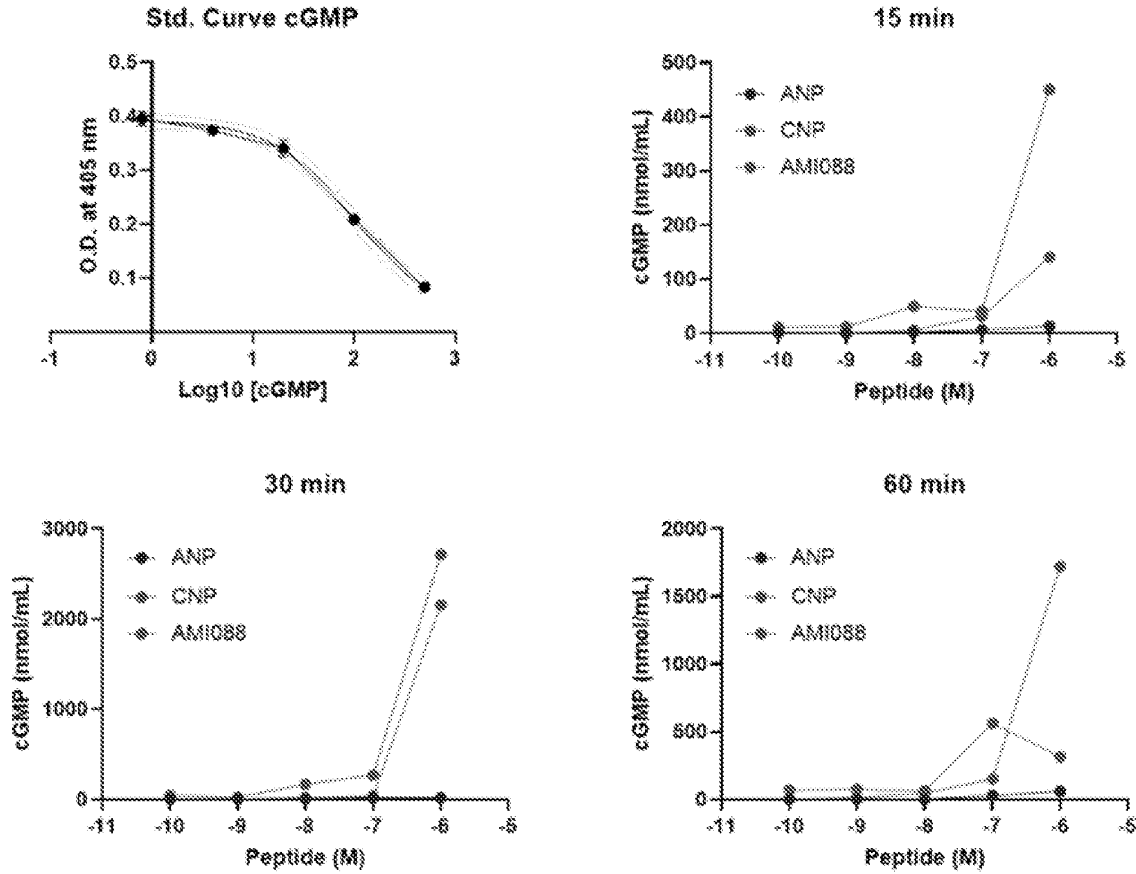


Fig. 8B

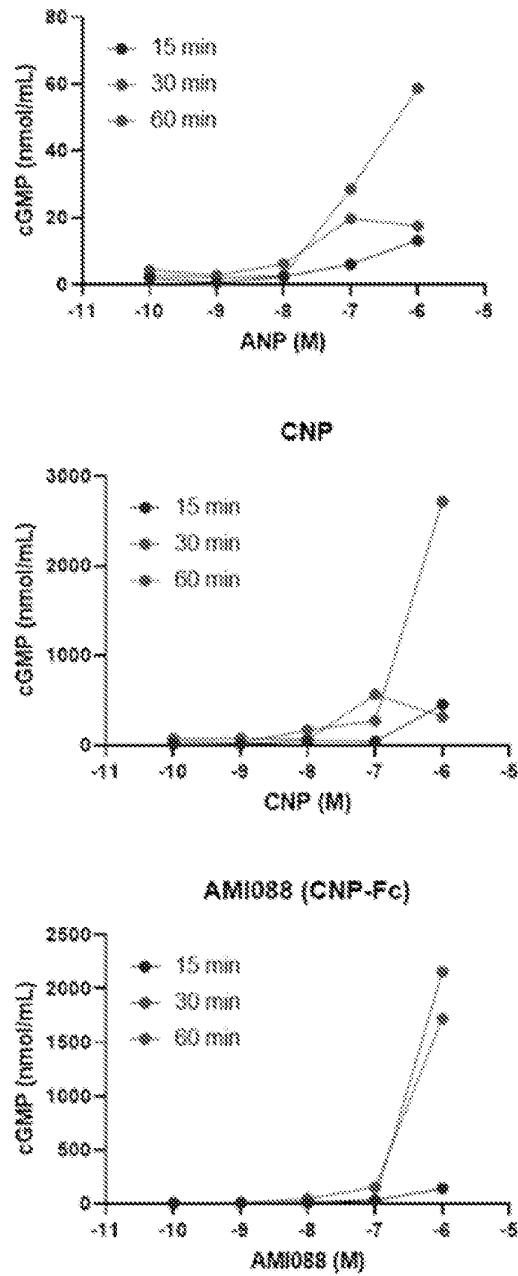


Fig. 9A

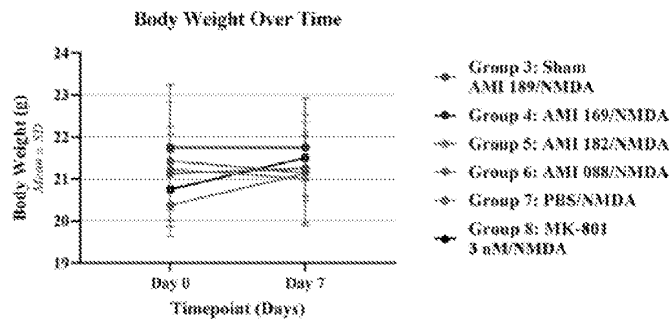


Fig. 9B

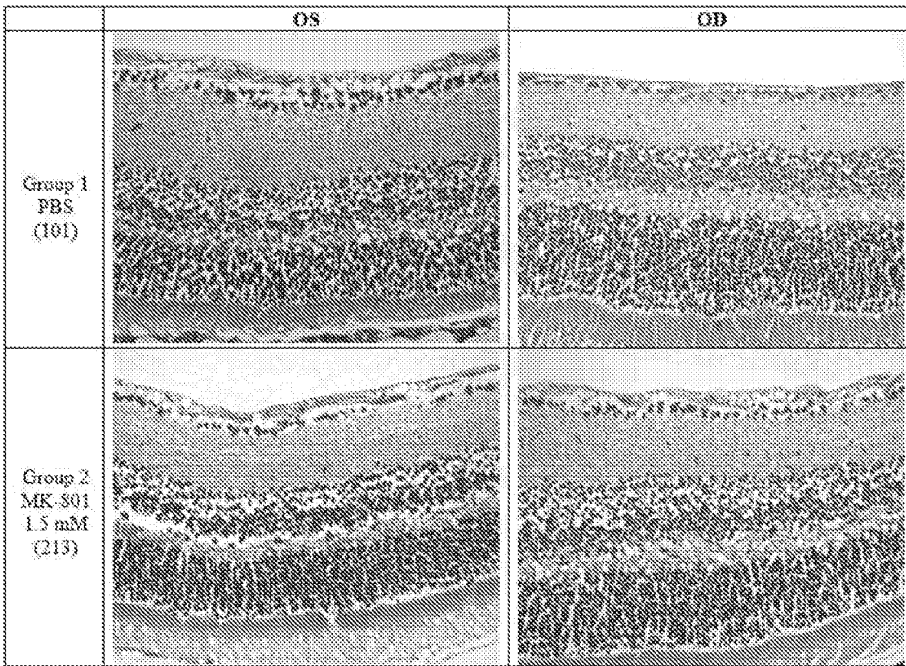
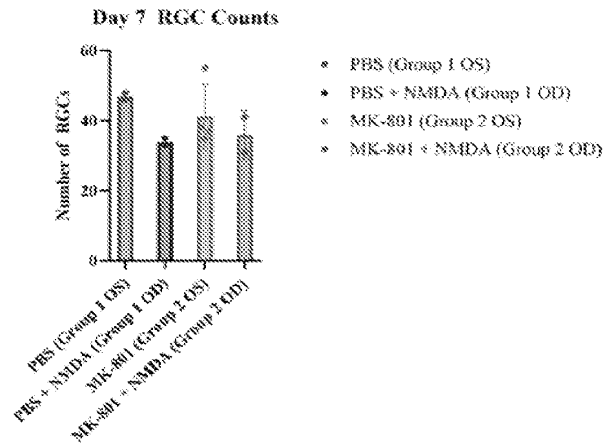


Fig. 9C



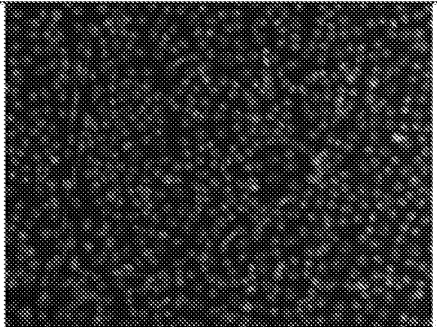
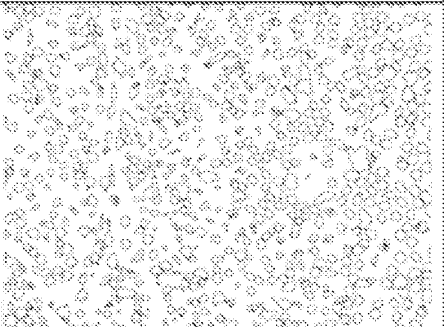
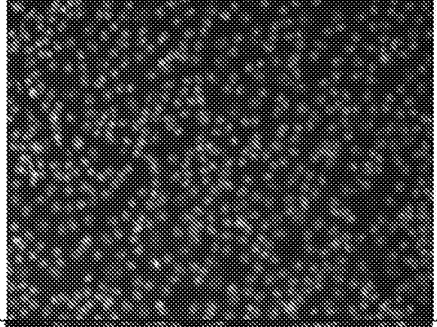
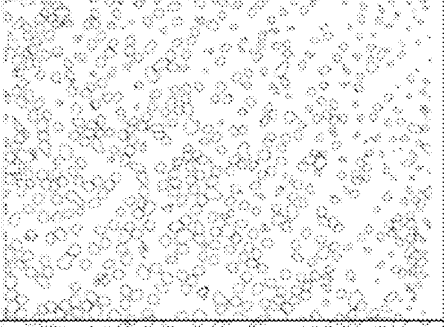
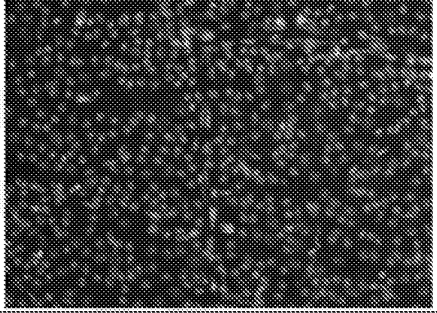
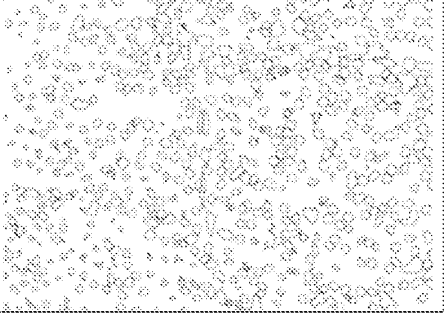
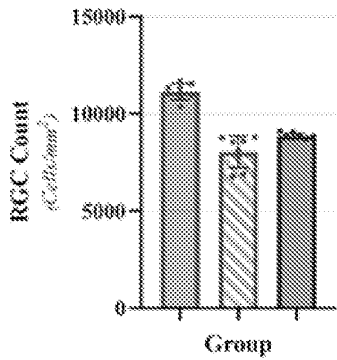
	20x	RGCs
Group 1 PBS/Control 109 OS		
Group 1 PBS/NMDA 107 OD		
Group 2 MK-801/NMDA 216 OD		

Fig. 10B

Retinal Ganglion Cell Count from Flatmount Analysis
Groups 1 and 2 Only, with 2.5 SD Exclusions



- Group 1: PBS/Control
- Group 1: PBS/NMDA
- Group 2: MK-801 (1.5nM)/NMDA

Fig. 10C

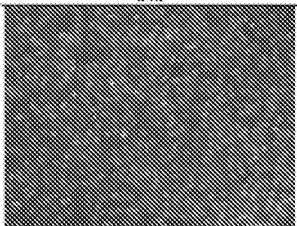
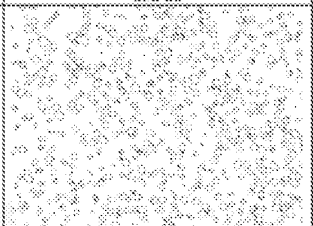
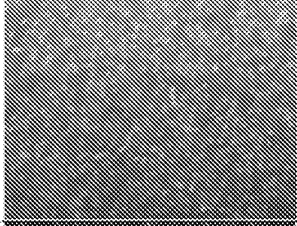
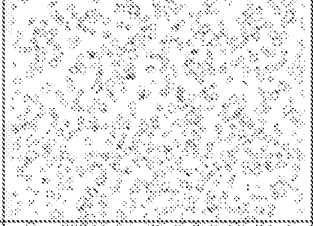
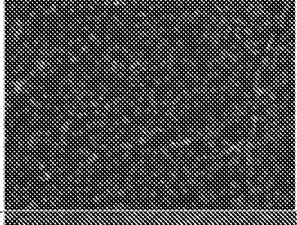
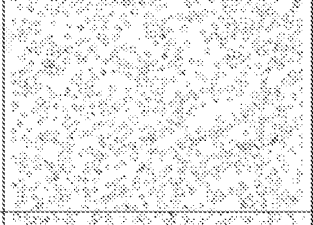
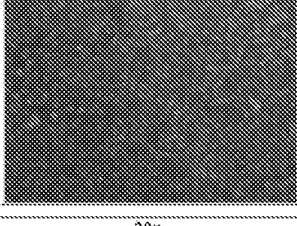
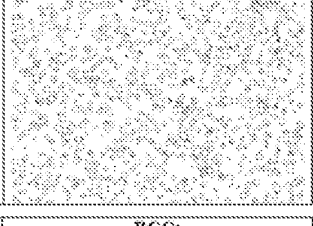
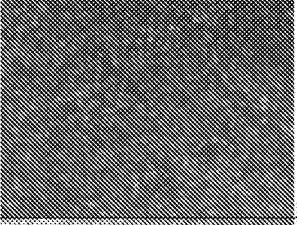
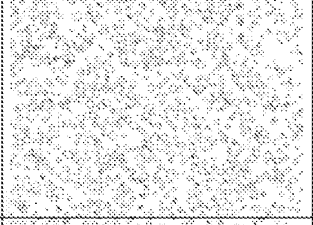
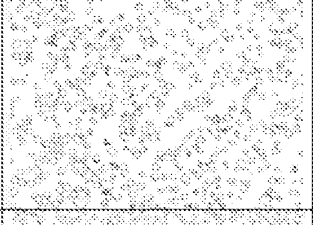
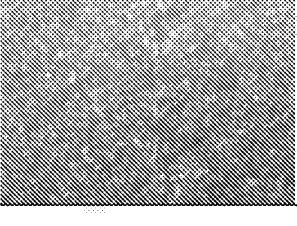
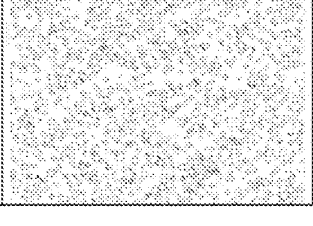
	20x	RGCs
Group 3 Sham AMI 182/NMDA 303 OD		
Group 4 AMI 169/NMDA 411 OD		
Group 5 AMI 182/NMDA 518 OD		
Group 6 AMI 088/NMDA 628 OD		
	20x	RGCs
Group 7 PBS/Control 739 OS		
Group 7 PBS/NMDA 737 OD		
Group 8 MK-801/NMDA 842 OD		

Fig. 10D

Retinal Ganglion Cell Count from Flatmount Analysis
with 2.5 SD Exclusions

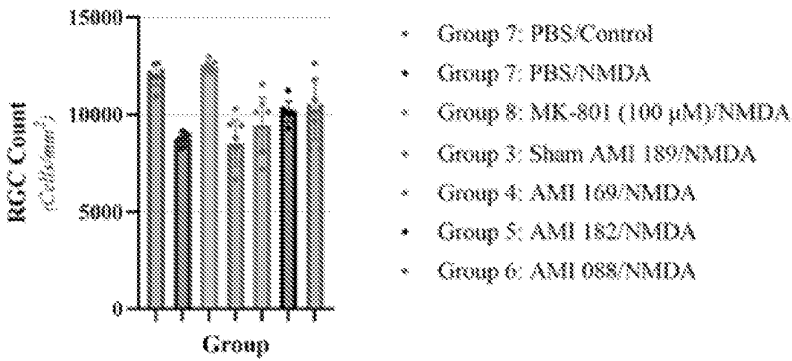


Fig. 11A

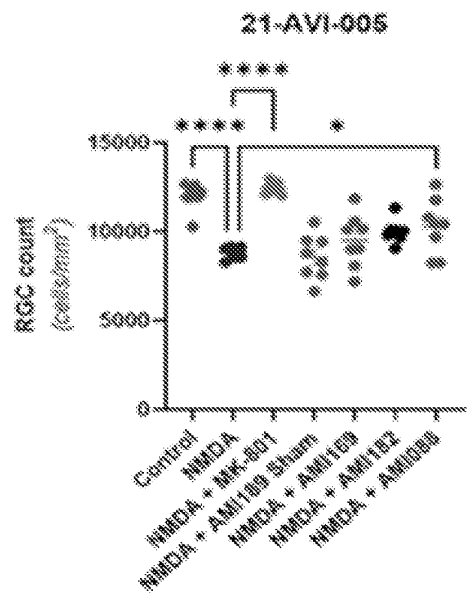


Fig. 11B

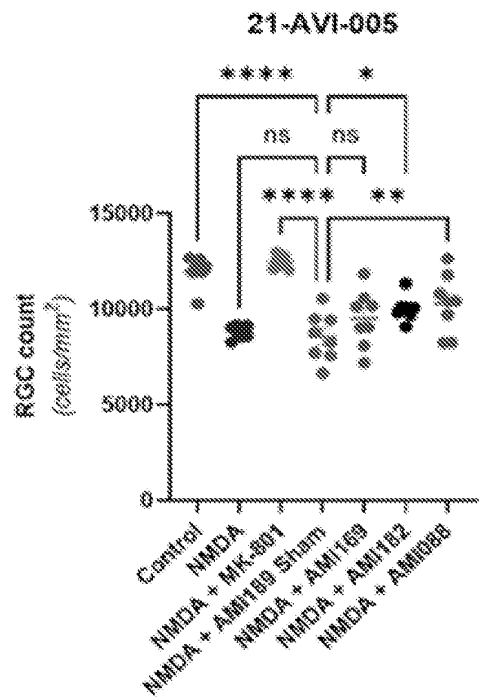


Fig. 12A

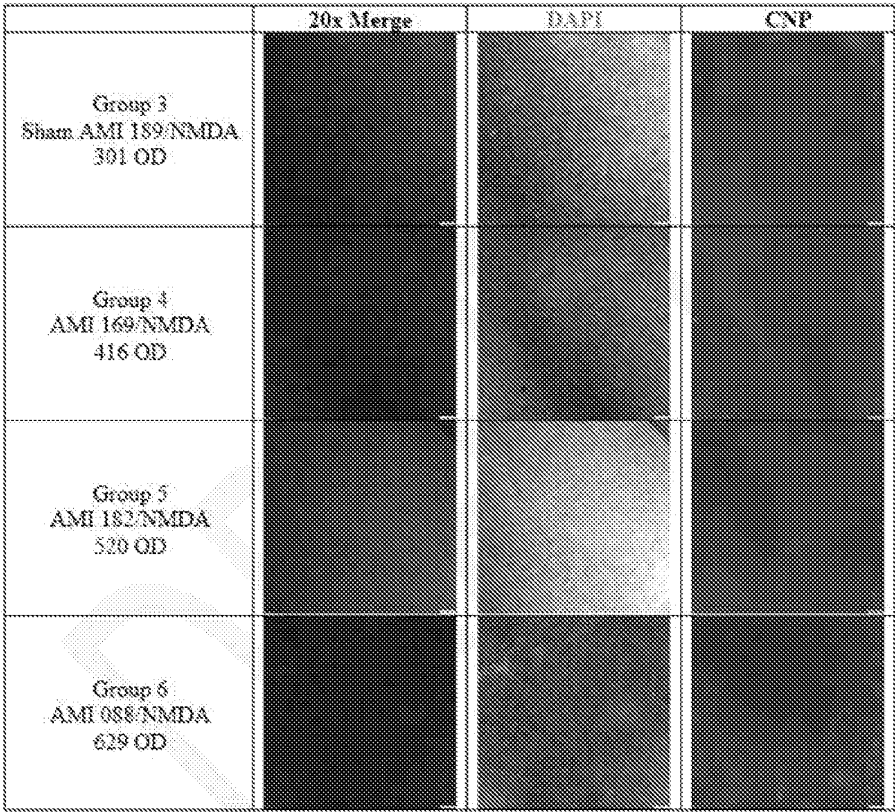
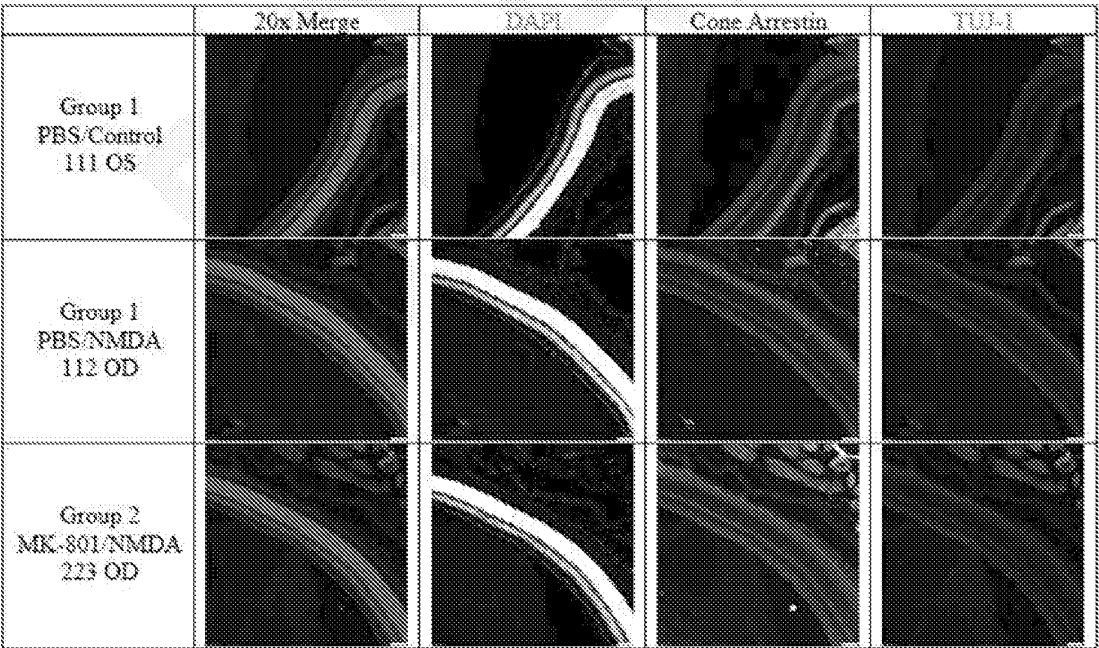


Fig. 12B



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Fig. 13A

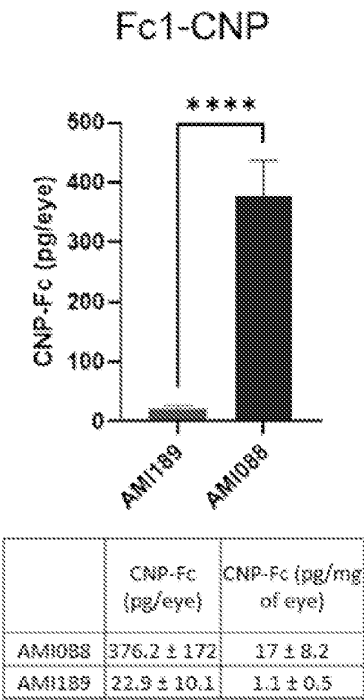


Fig. 13B

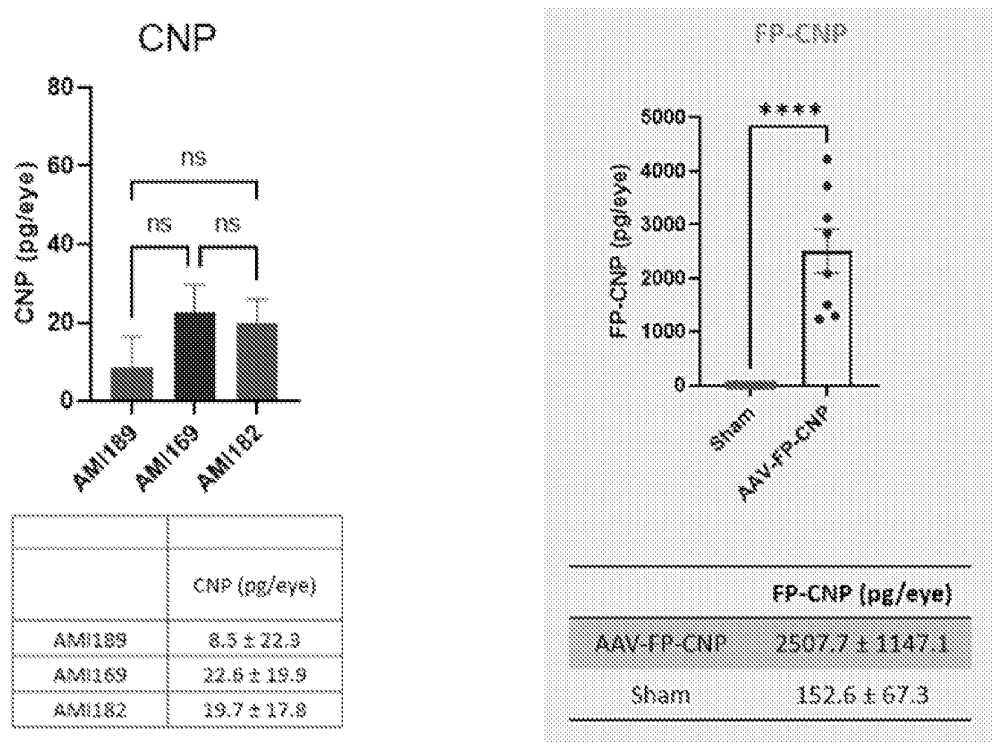


Fig. 14

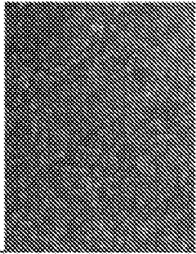
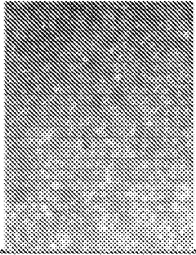
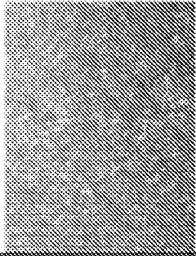
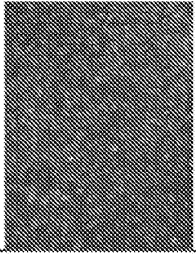
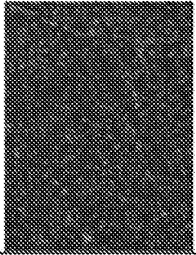
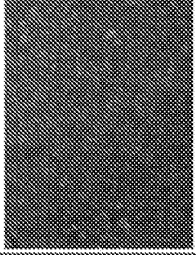
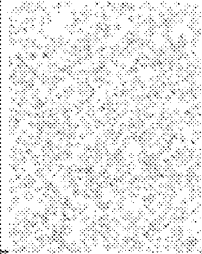
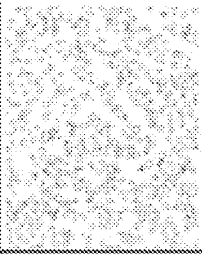
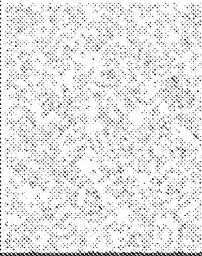
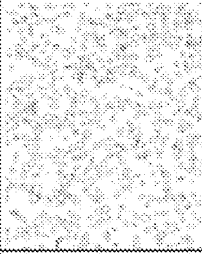
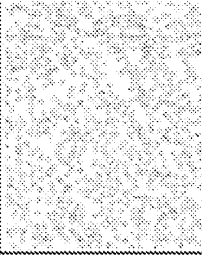
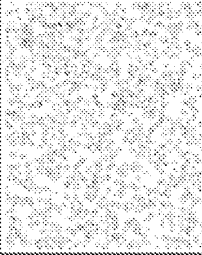
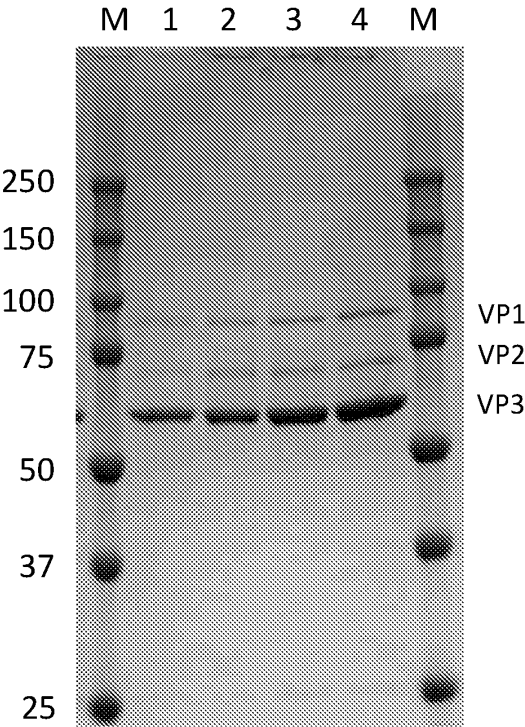
Mouse eye was injected IVT 1 ul of AAV construct at 4E+8 vg/eye, 28 days prior to NMDA injection (details are in the report)						
Group ID	Non treatment	Excitotoxicity	MK-801	Sham vector AMI 189 4E+8 vg/eye IVT	AAV2.N54-CNP36 AMI182 4E+8 vg/eye IVT	AAV2.N54-Fc-CNP36 AMI088 4E+8 vg/eye IVT
2.5 mM NMDA	0	0.5 µL	0.5 µL	0.5 µL IVT	0.5 µL IVT	0.5 µL IVT
Active molecule	PBS 0.5 µL IVT	PBS* 0.5 µL IVT	100 µM MK-801 0.5 µL IVT*	None	CNP36	Fc-CNP36
Representative eye flatmount	739 OS	737 OD	842 OD	303 OD	518 OD	628 OD
20x Retinal mounts Stained with DAPI and TUJ-1						
						
RGCs	RGC counts			RGC counts		
Flatmount Analysis						

Fig. 15



Lane 1. AAV2 control
Lane 2. AMI054-AMI061
Lane 3. AMI054-AMI087
Lane 4. AMI054-AMI088

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Fig. 16A

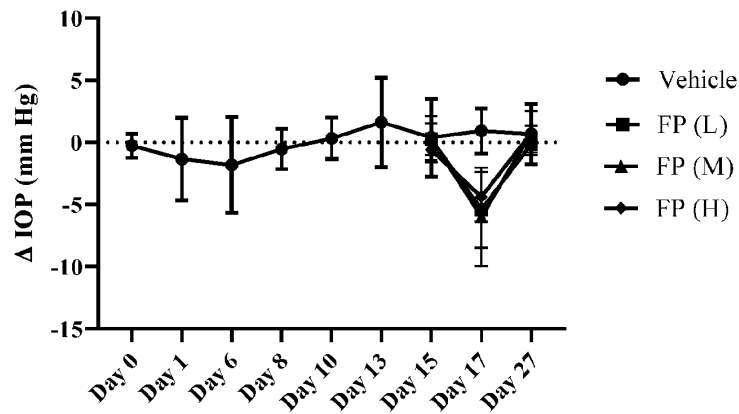


Fig. 16B

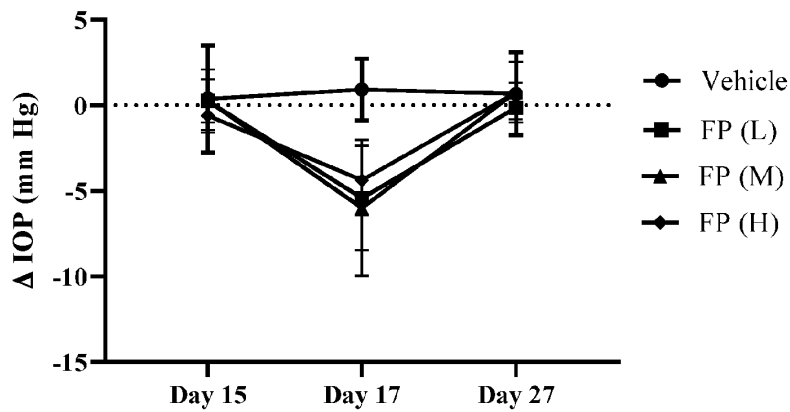


Fig. 16C

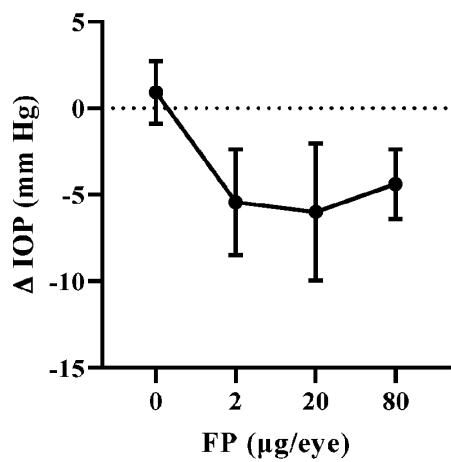


Fig. 17A

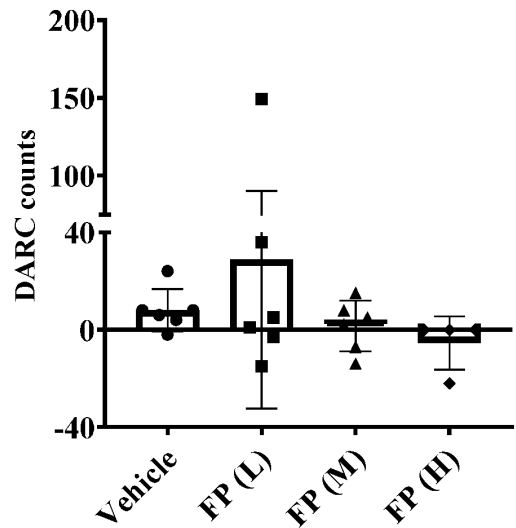


Fig. 17B

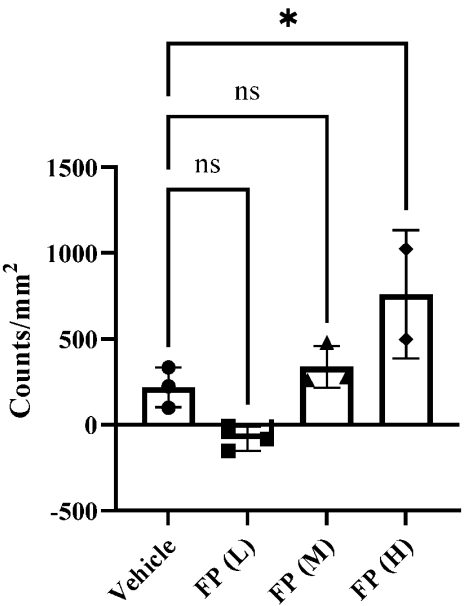


Fig. 18

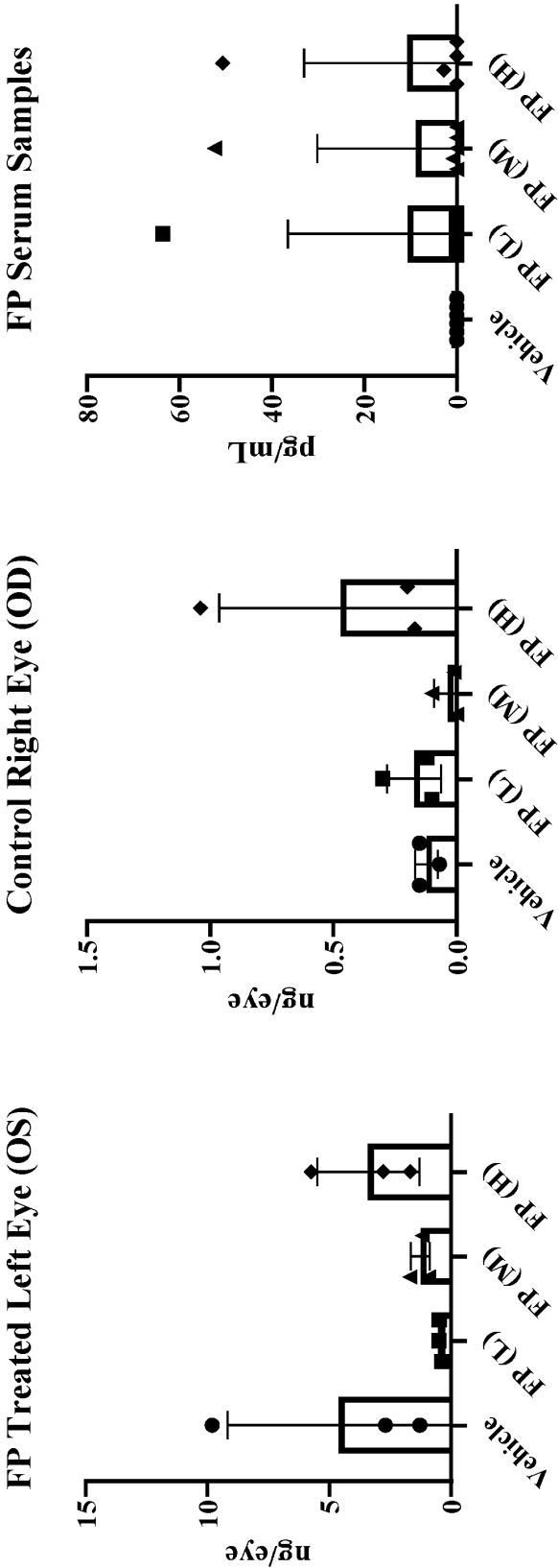


Fig. 19A

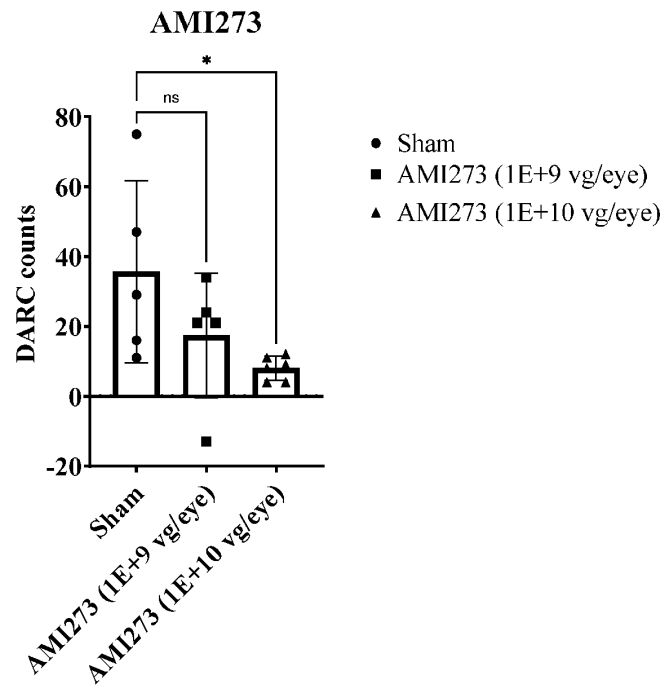


Fig. 19B

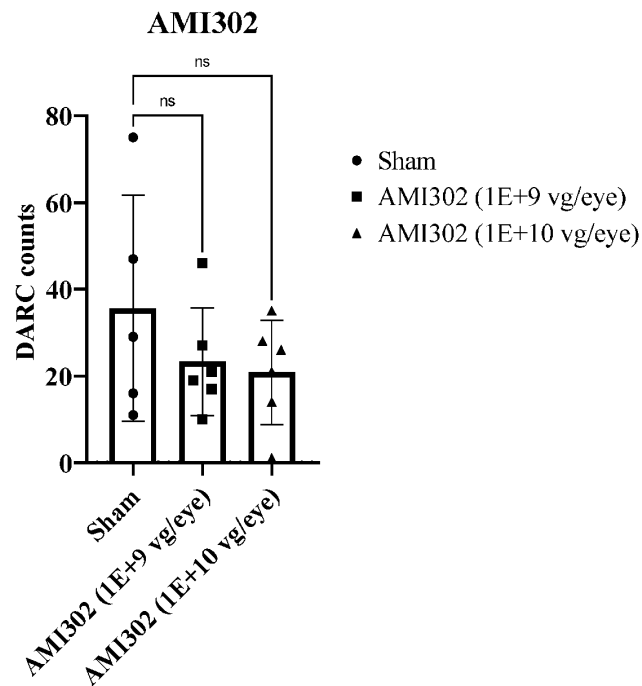


Fig. 20A

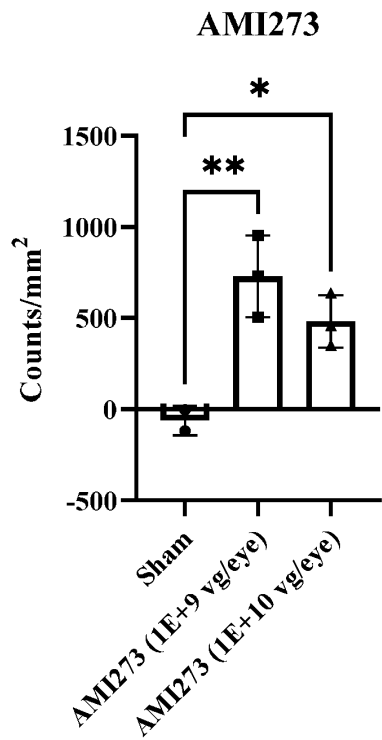


Fig. 20B

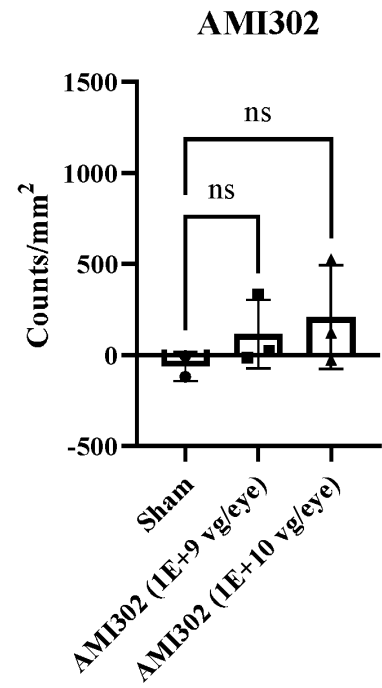


Fig. 21

Therapeutic Preservation of RGC Density

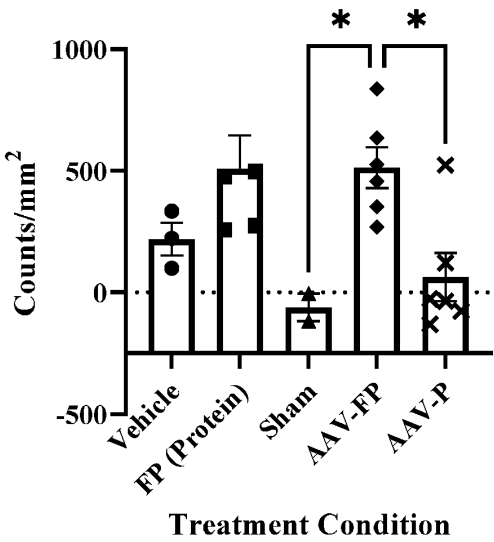


Fig. 22

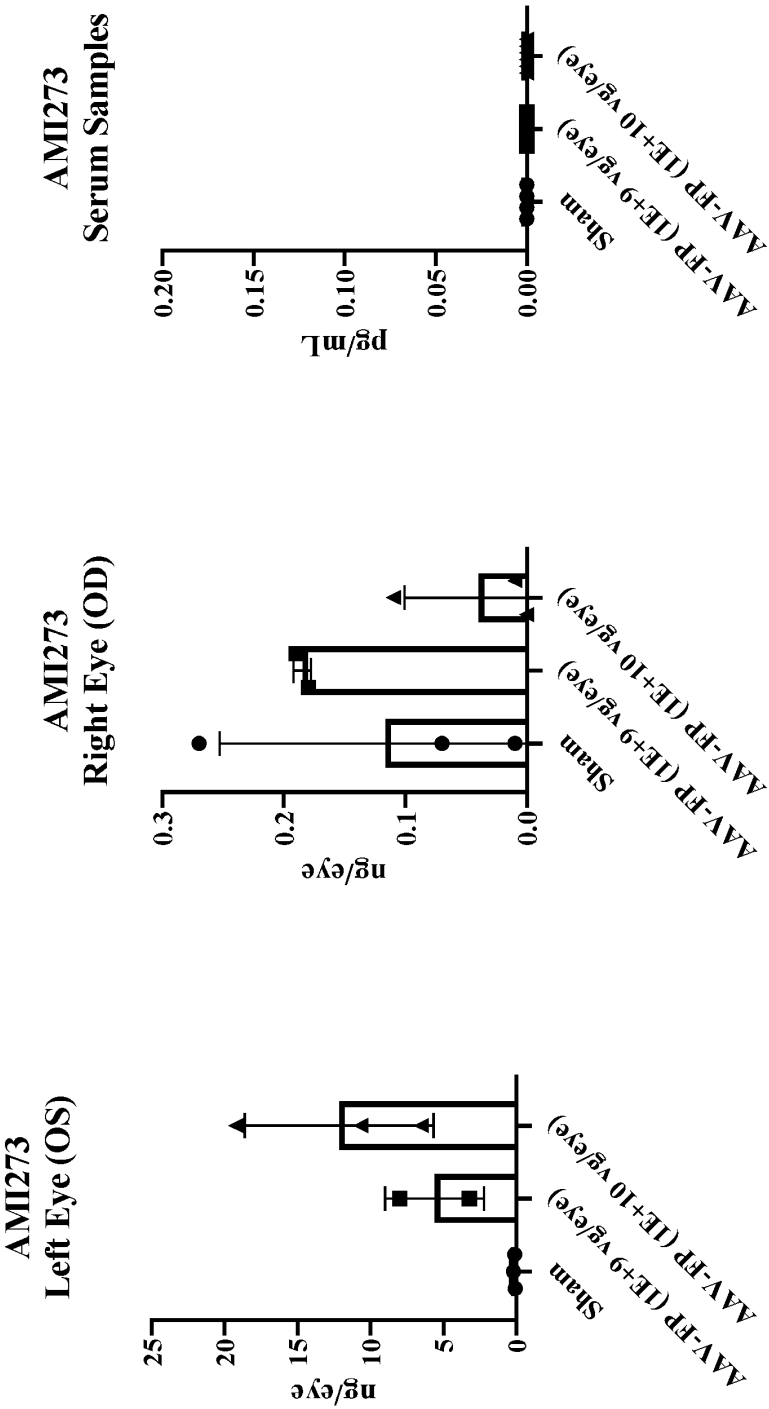


Fig. 23

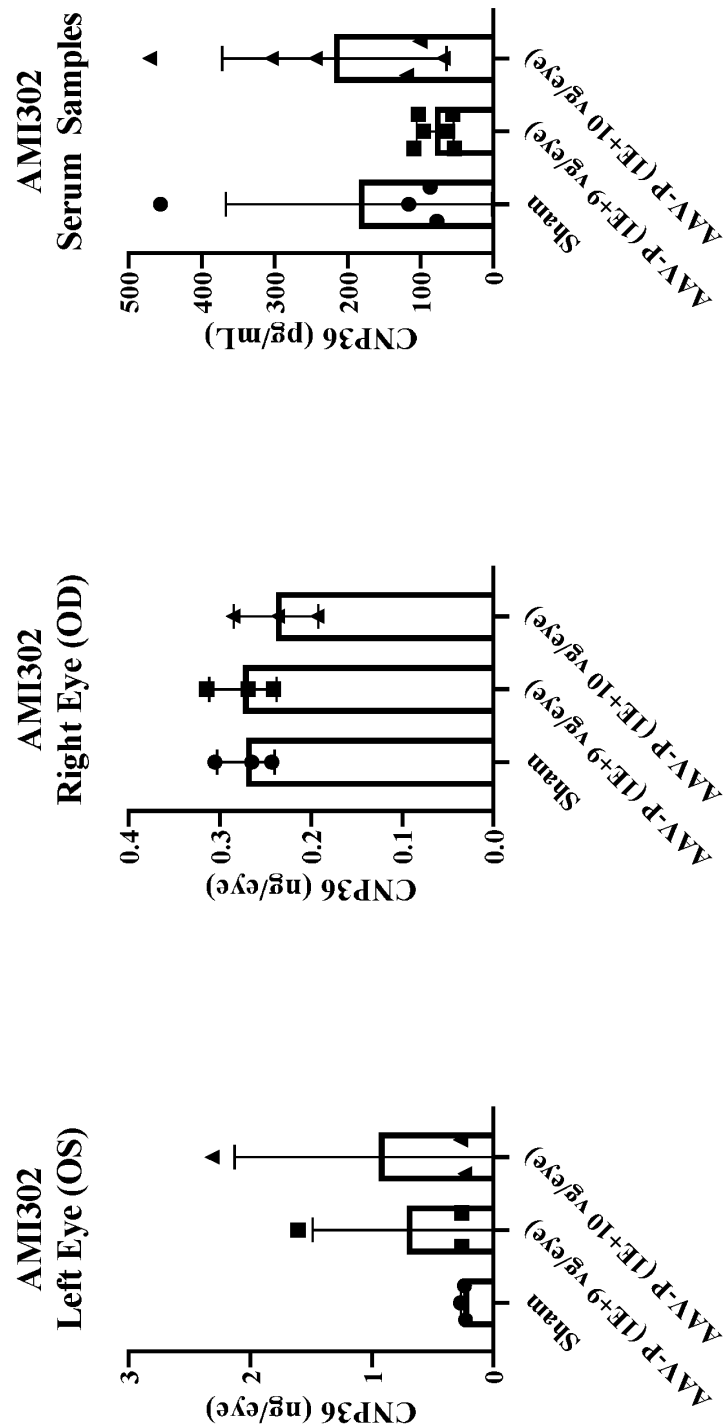


Fig. 24

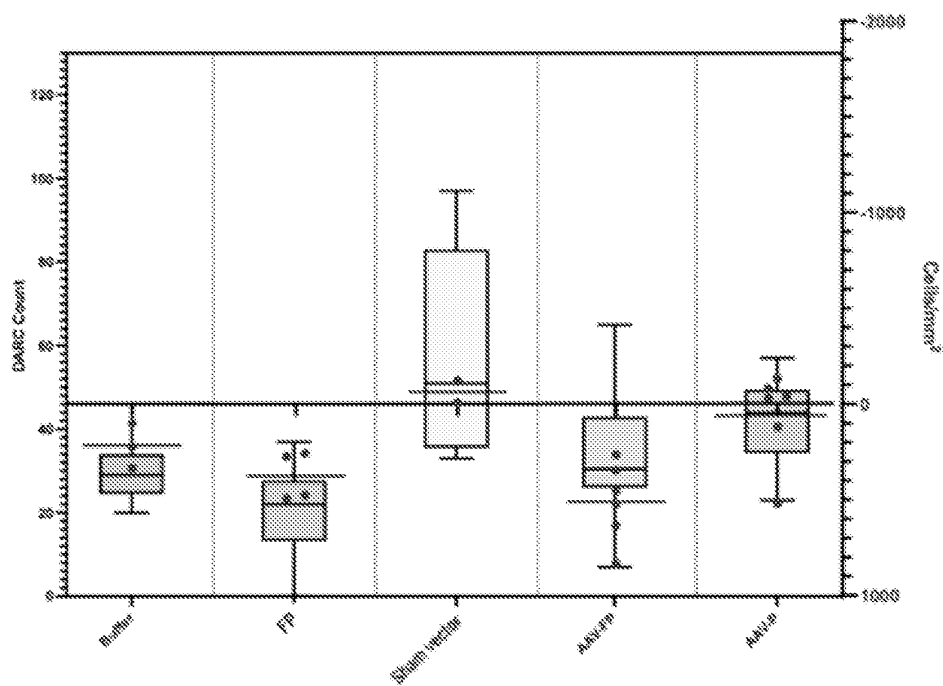


Fig. 25A

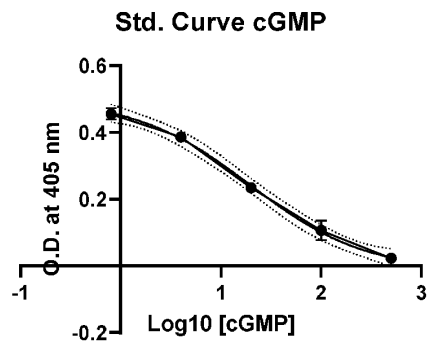


Fig. 25B

