

FIG. 1A

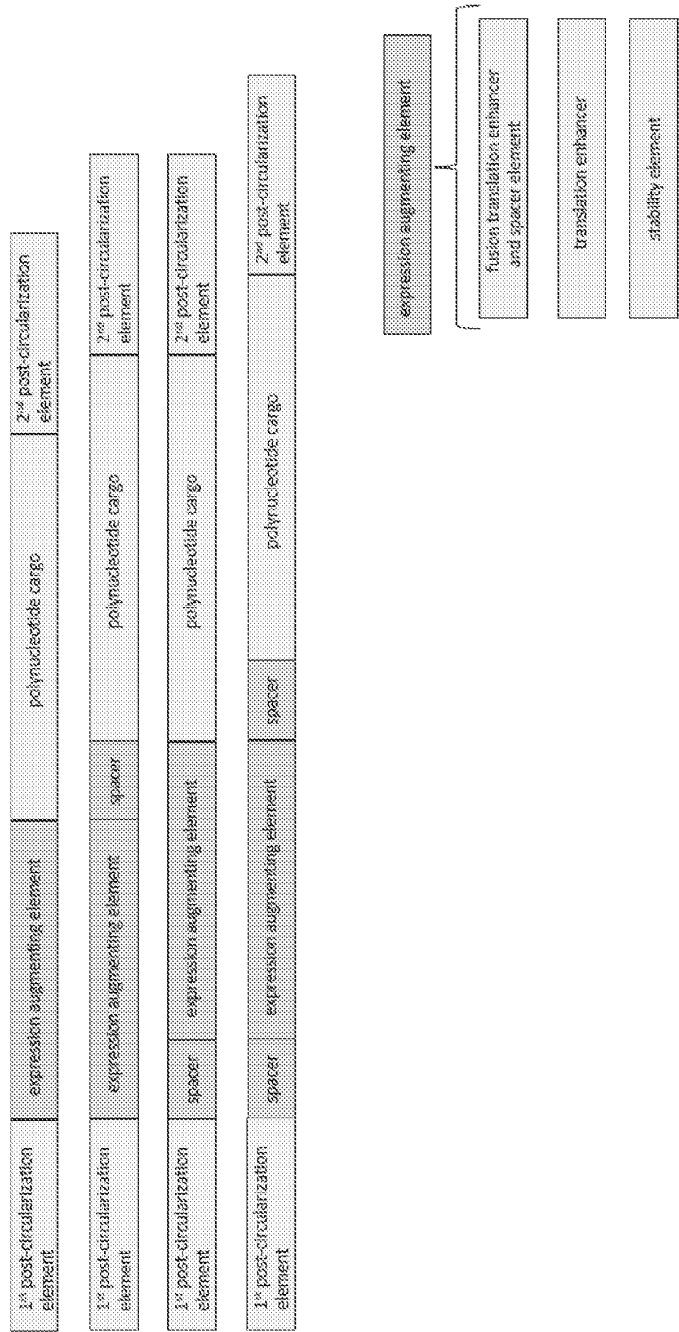
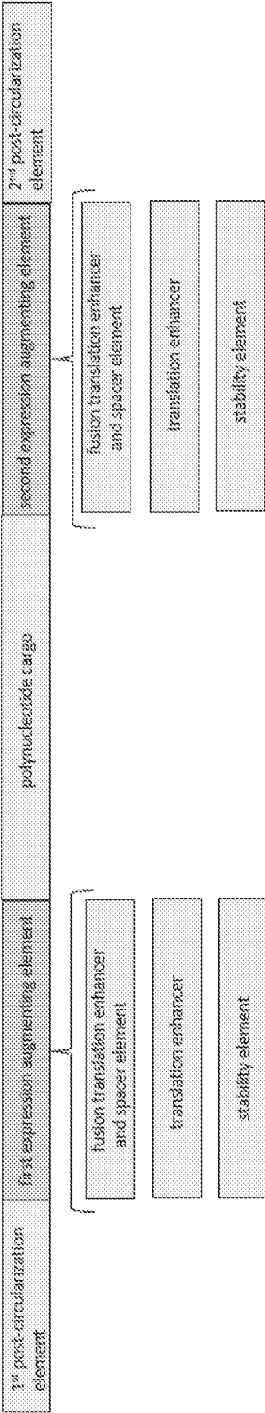


FIG. 1B



FIG. 1C





 DEPARTMENT OF HEALTH AND HUMAN SERVICES

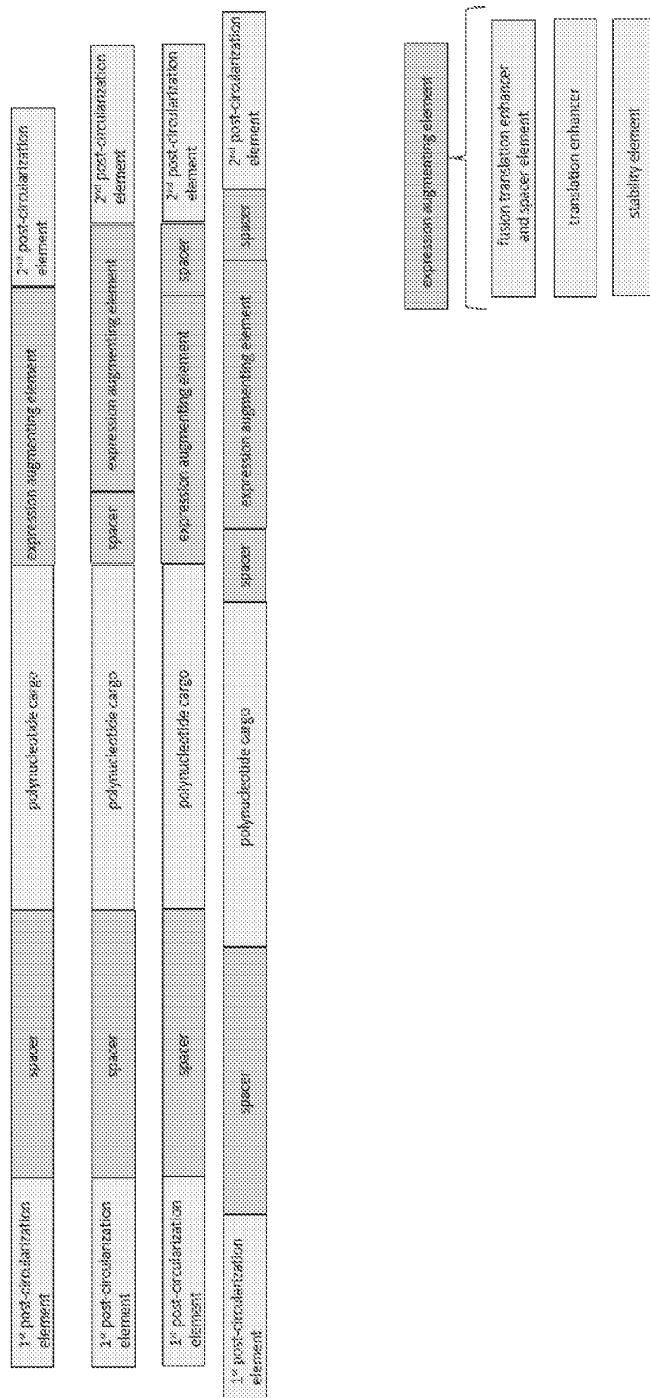


FIG. 1E

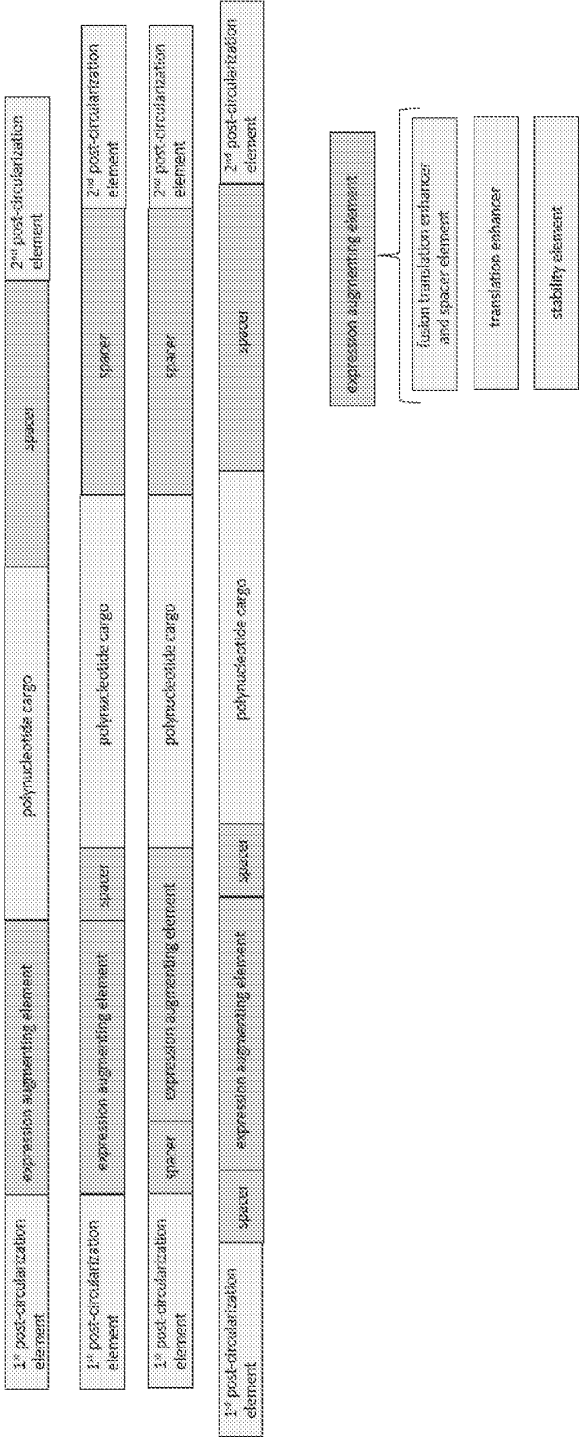


FIG. 1F

Dual Spacer Design



Single Spacer Design

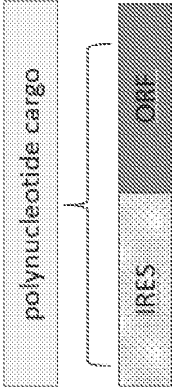


FIG. 2

RES	ORF	5' spacer element	3' spacer element	hcdRNA
EMCV	GLUC	AU50	None	69
EMCV	GLUC	AU120	None	64
EMCV	GLUC	AU150	None	65
EMCV	GLUC	AU200	None	57
EMCV	GLUC	AU250	None	50
EMCV	GLUC	AU300	None	51
EMCV	GLUC	AU50	AU50	74
EMCV	GLUC	AU50	AU80	74
EMCV	GLUC	AU50	AU120	74
EMCV	GLUC	AU80	AU50	74
EMCV	GLUC	AU80	AU80	75
EMCV	GLUC	AU80	AU120	74
EMCV	GLUC	AU120	AU50	74
EMCV	GLUC	AU120	AU80	73
EMCV	GLUC	AU120	AU120	76
modified CVB3	GLUC	AU50	None	73
modified CVB3	GLUC	AU50	AU50	80
modified CVB3	GLUC	AU120	AU120	80
modified CVB3	GLUC	AU300	AU300	76
modified CVB3	hEPO	AU50	None	90
modified CVB3	hEPO	AU50	AU50	82
modified CVB3	hEPO	AU120	AU120	85
modified CVB3	hEPO	AU300	AU300	84

FIG. 3B

Translation Enhancer	Single Design (%circRNA)	Dual Design (%circRNA)
EJC3	15	55
EJC5	17	54
EJC2	20	64
MTDH	25	60
EJC4	28	68
UBAP2L	37	64
EJC7-8	45	66
EJC8-7	45	65
EJC6	48	62
EJC9	50	63
ZC3H12D	53	42
EJC7	55	67
EJC8	68	70
AIMP1	69	76

FIG. 3A

Translation Enhancer	Motif	Sequence
AIMP1	AATAAA	AATAAACATAAACCAATAAACCATAAACCCCAATAAACATAAAACC
IFI2	AGTGTA	AGTGTAAGGTAAAGGTAAAGGTAAAGGTAAAGGTAAAGGTAA
CLK3	TCGATG	TCGATGATCGATGAATCGATGATCGATGAATCGATGATCGATGA
MTDH	TTGCCG	TTGCCGATTGCCGAATTGCCGATTGCCGAATTGCCGATTGCCGA
UBAP2L	ATGCCG	ATGCCGAATGCCGAATGCCGAATGCCGAATGCCGAATGCCGAATGCCGA
EJC2	CGGCGC	CGGCGCTCGGCGCTTCGGCGCTTCGGCGCTTCGGCGCTTCGGCGCTT
EJC3	CGCCGC	CGCCGCTCGCCGCTTCGCCGCTTCGCCGCTTCGCCGCTTCGCCGCTT
EJC4	CGGGGC	CGGGGCTCGGGGCTTCGGGGCTTCGGGGCTTCGGGGCTTCGGGGCTT
EJC5	GCCGCCGCCGC	GCCGCCGCCGCTTCGCCGCCGCCGCTTCGCCGCCGCCGCTTCGCCGCCGCCGCTT
EJC6	GGCGGCCGCC	GGCGGCCGCCCTTGGCGGCCGCCCTTGGCGGCCGCCCTTGGCGGCCGCCCTTTT
EJC7	CCCCAGCACC	CCCCAGCACCCTTCCCAGCACCCTTCCCAGCACCCTTCCCAGCACCCTTTT
EJC8	GAAGAAGAAG	GAAGAAGAAGUGAAGAAGAAGUUGAAGAAGAAGUUGAAGAAGAAG
EJC9	CCAGCCGCAC	CCAGCCGCACCCAGCCGCACCCAGCCGCACCCAGCCGCACCCAGCC
EJC7-8	CCCCAGCACC & GAAGAAGAAG	CCCCAGCACCCTTCCCAGCACCAGGAAGAAGTTCGCCAGCACCCTTCCCAGCACC
EJC8-7	GAAGAAGAAG & CCCCAGCACC	GAAGAAGAAGUGAAGAAGAAGTTCGCCAGCACCCTTCCCAGCACC

FIG. 4A

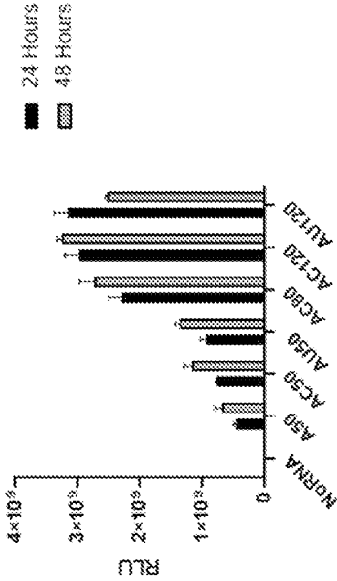


FIG. 4B

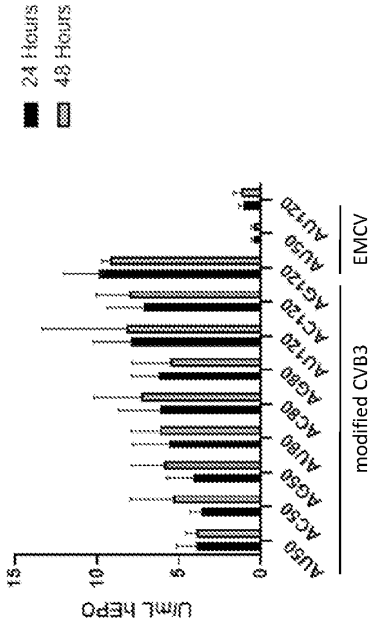


FIG. 5

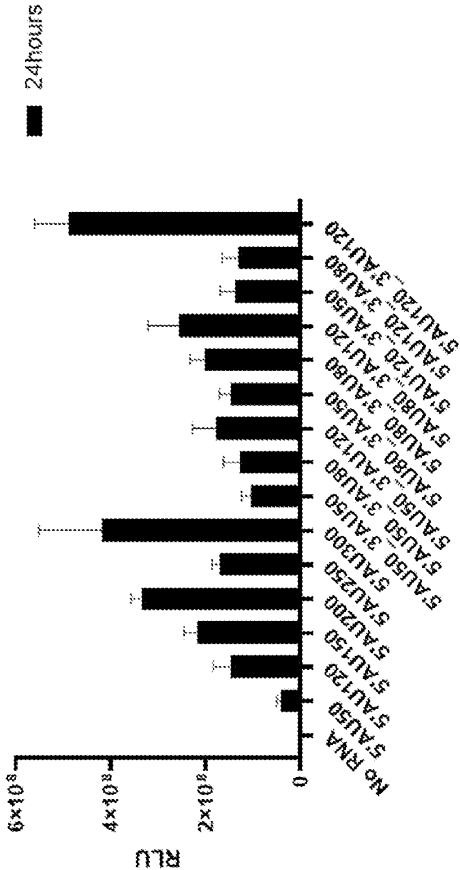


FIG. 6B

hEPO

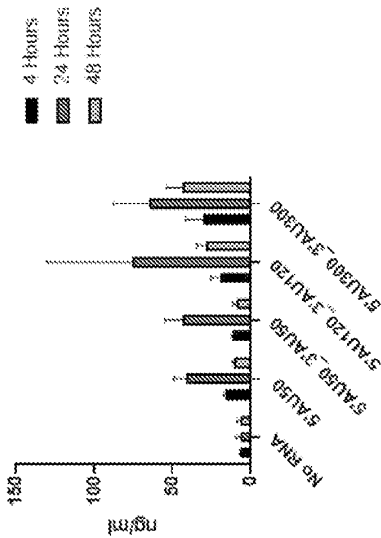


FIG. 6A

GLuc

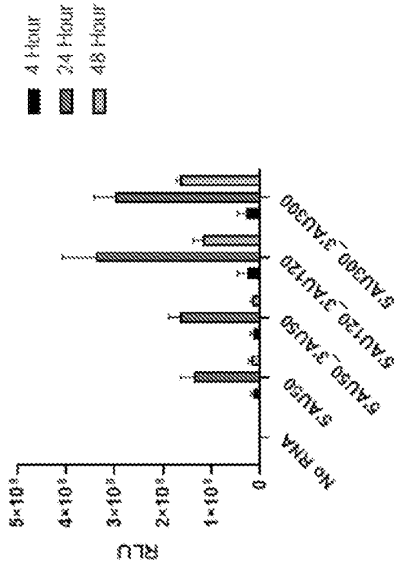


FIG. 7B

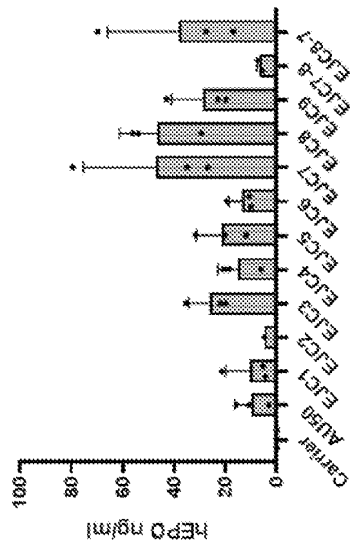


FIG. 7A

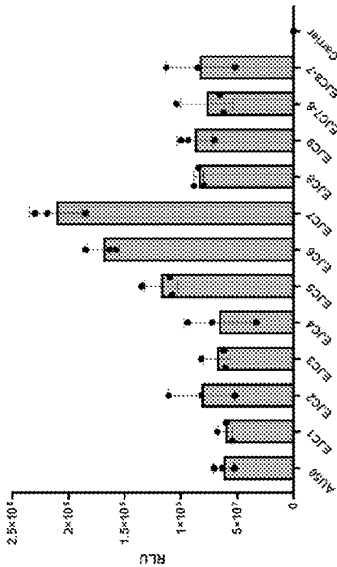


FIG. 8

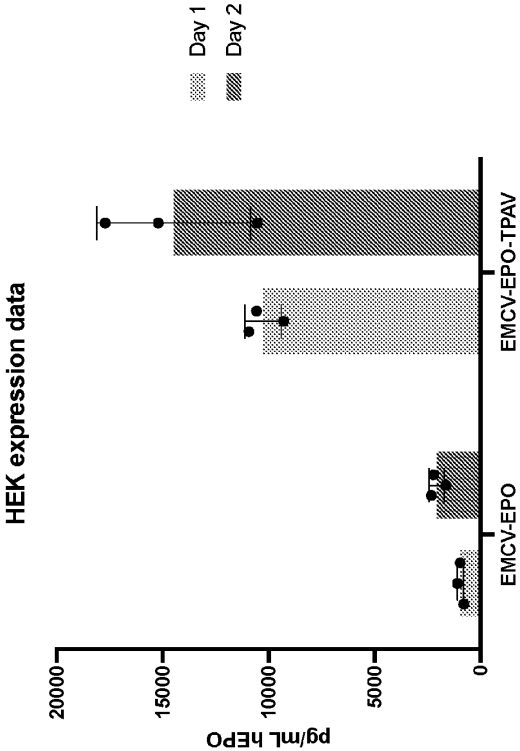


FIG. 9

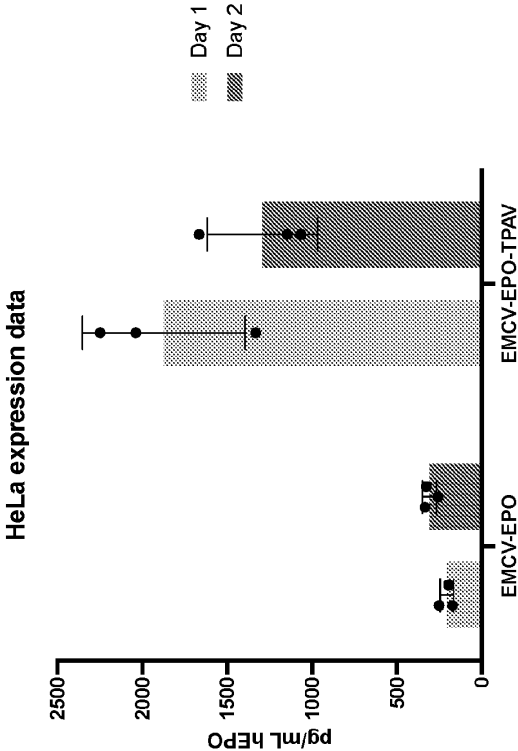


FIG. 10

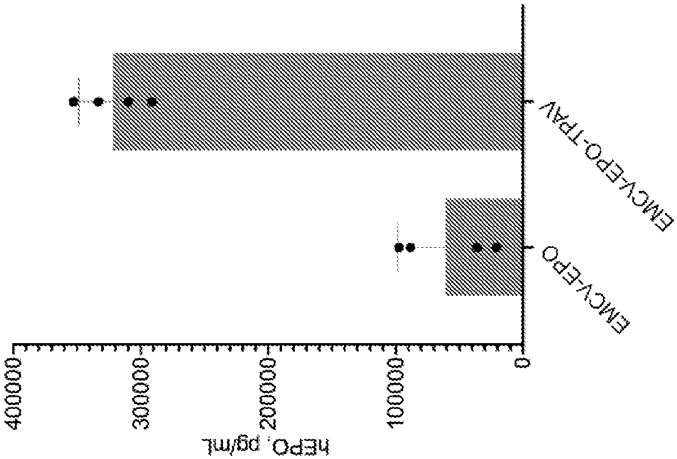


FIG. 11

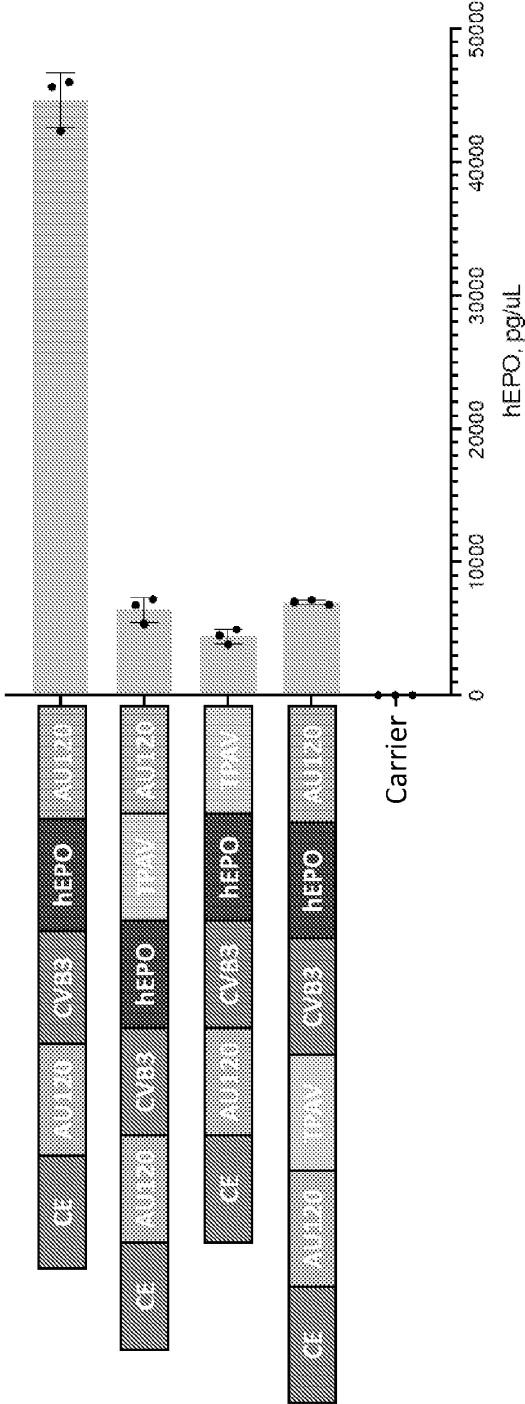


FIG. 12

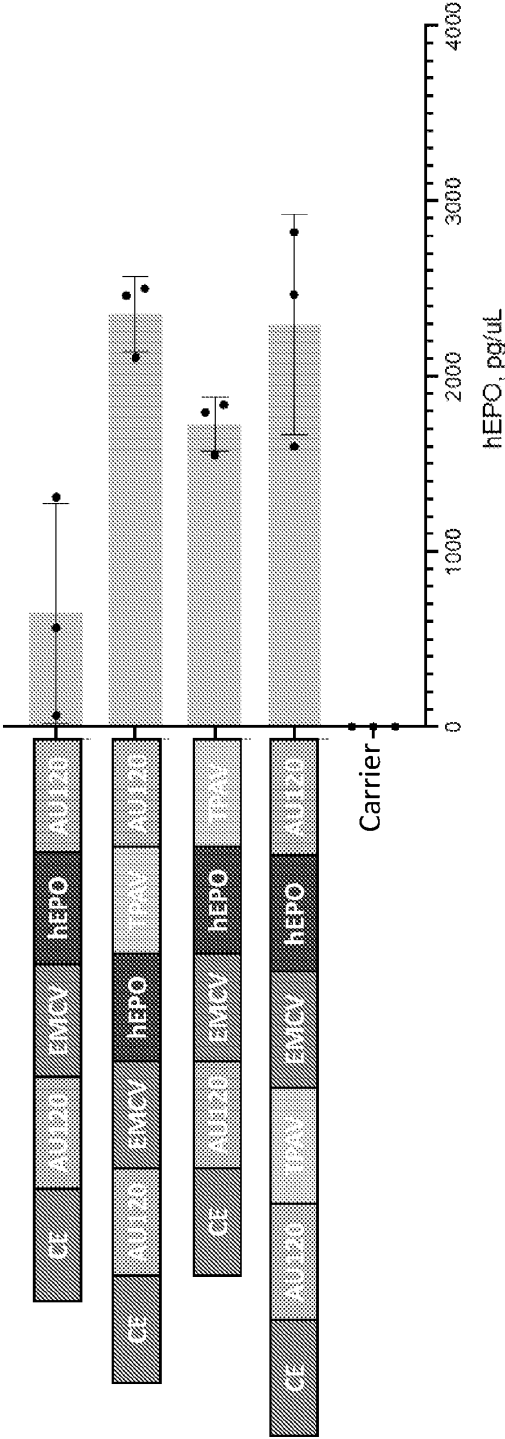


FIG. 14A

Enhancer Element Screen
d2eGFP Constructs

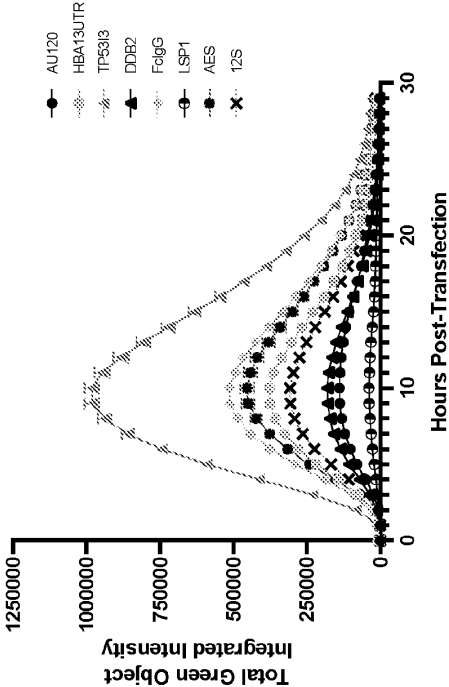
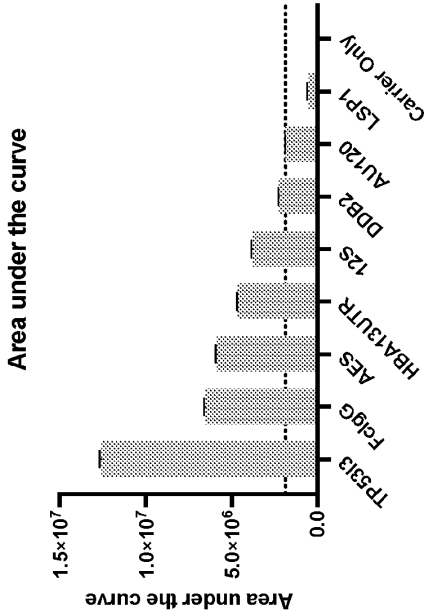


FIG. 14B



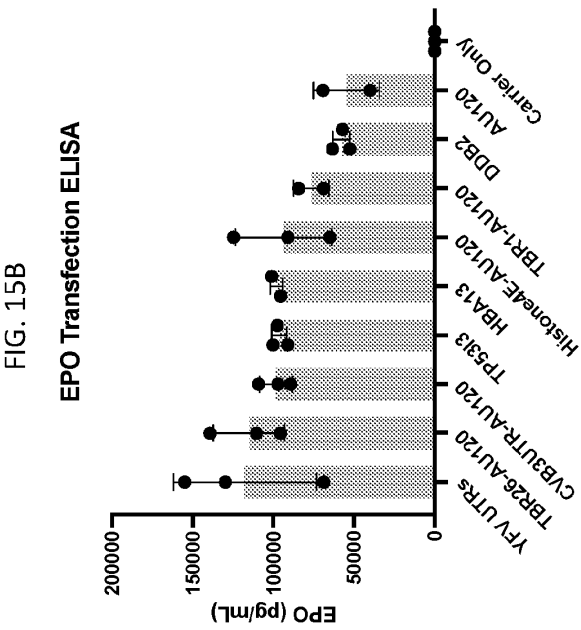


FIG. 15C

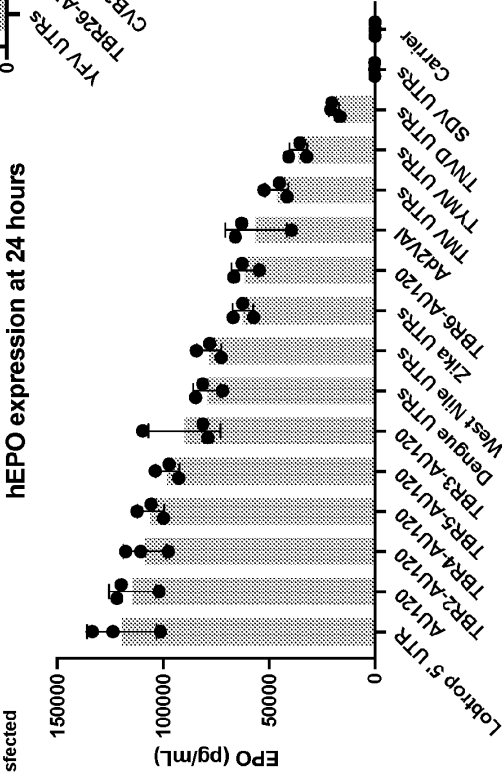


FIG. 15A

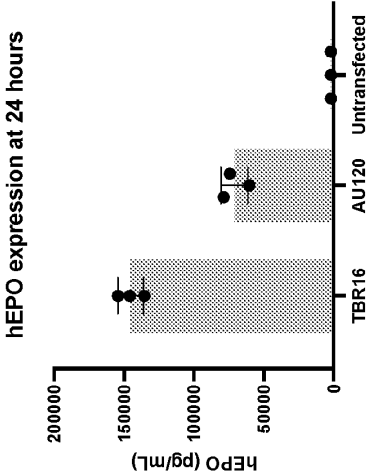


FIG. 16B

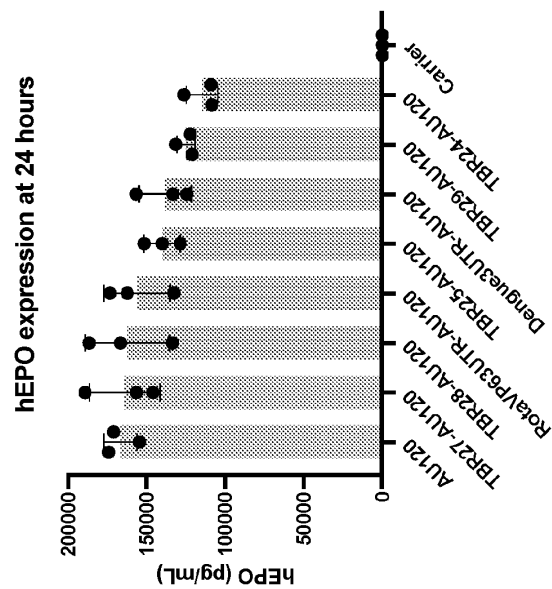


FIG. 16A

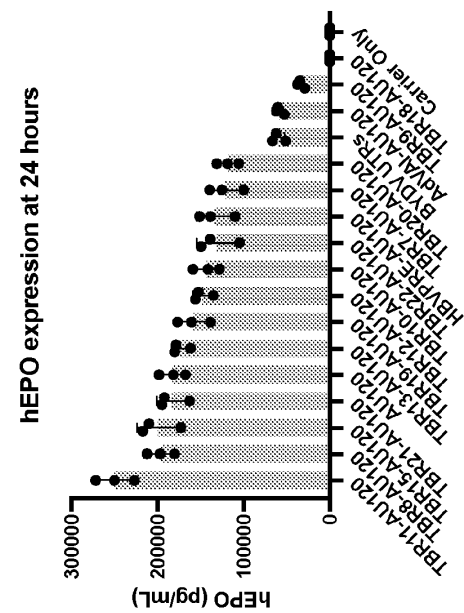


FIG. 18A

Minimized triple eIF4G expression- 48h

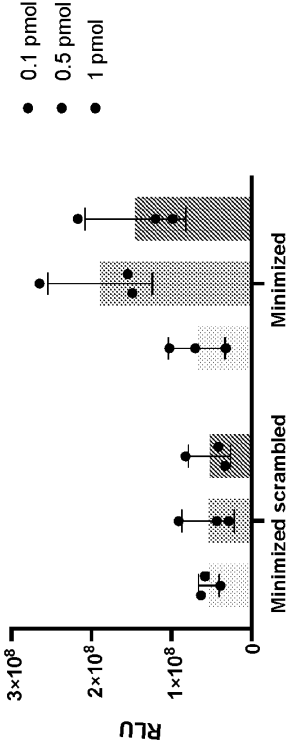


FIG. 18B

Regular triple eIF4G expression- 48h

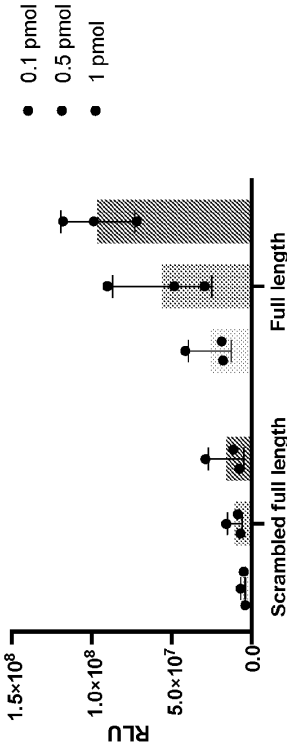


FIG. 19

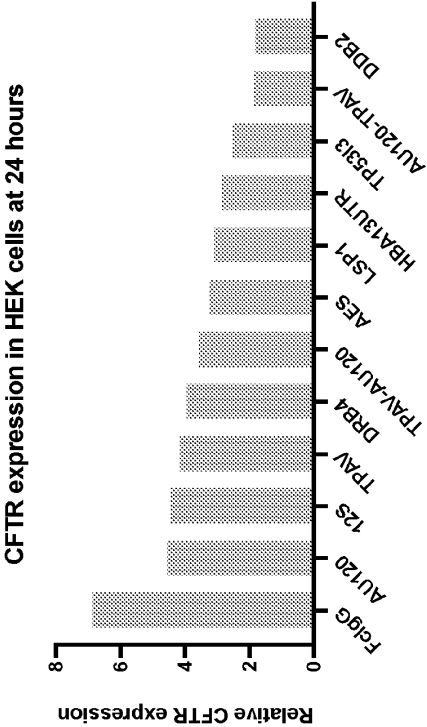
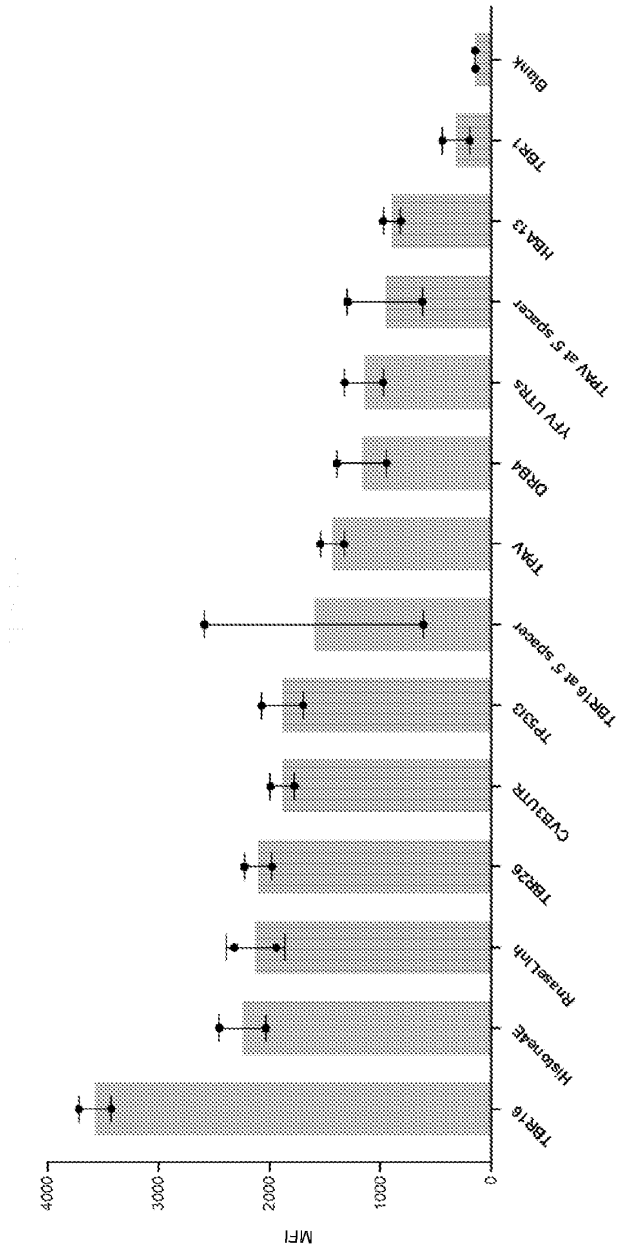


FIG. 20
Polypeptide expression in HEK cells at



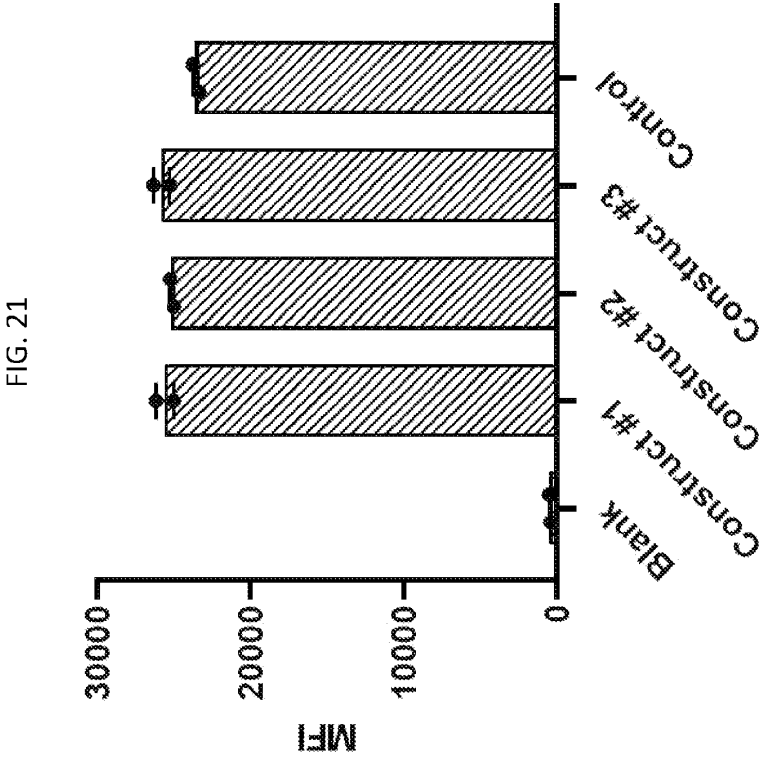


FIG. 22

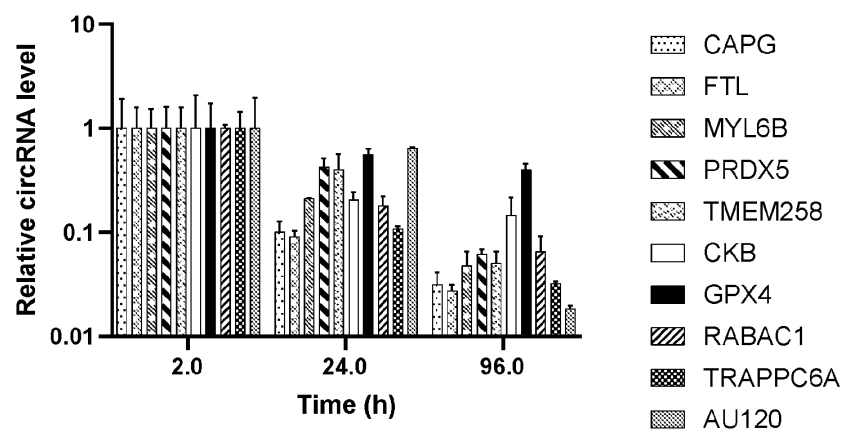


FIG. 23A

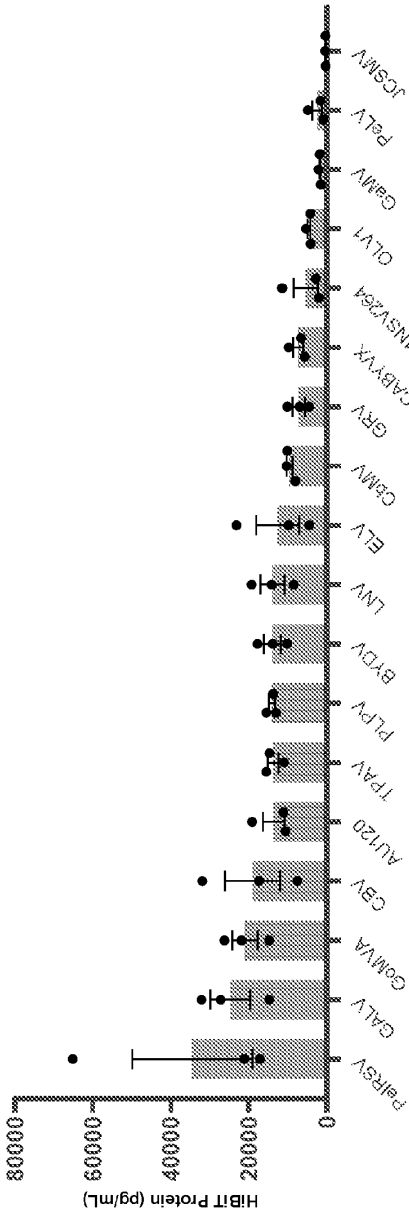
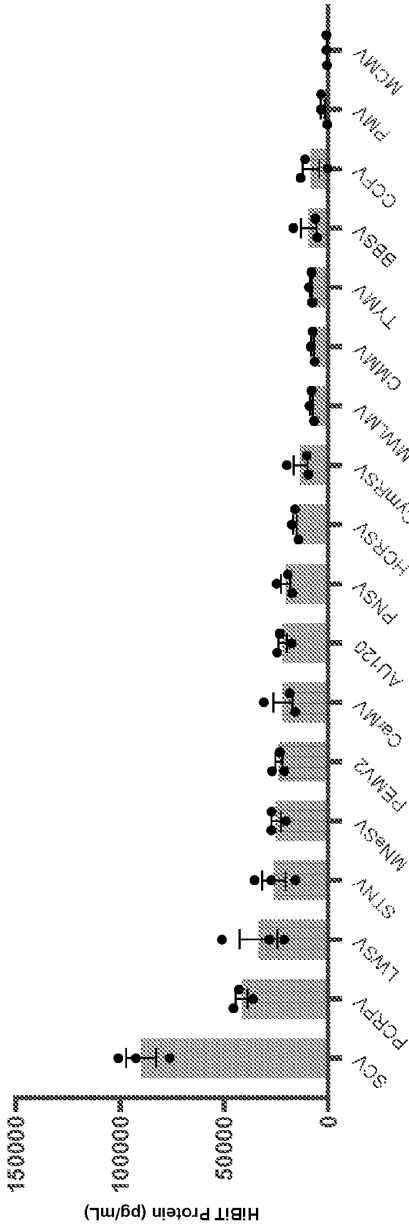
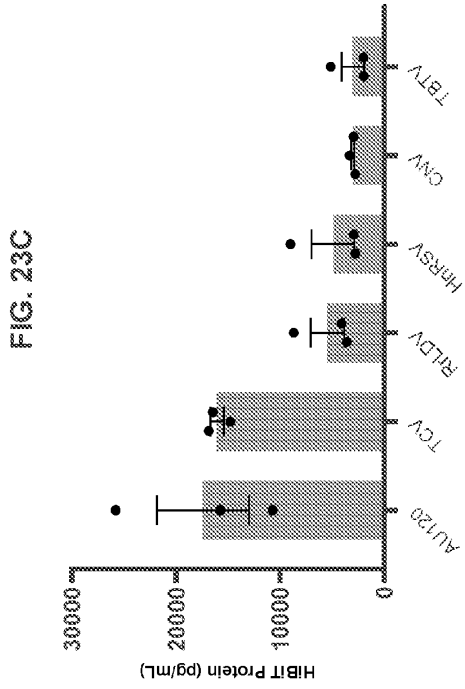


FIG. 23B





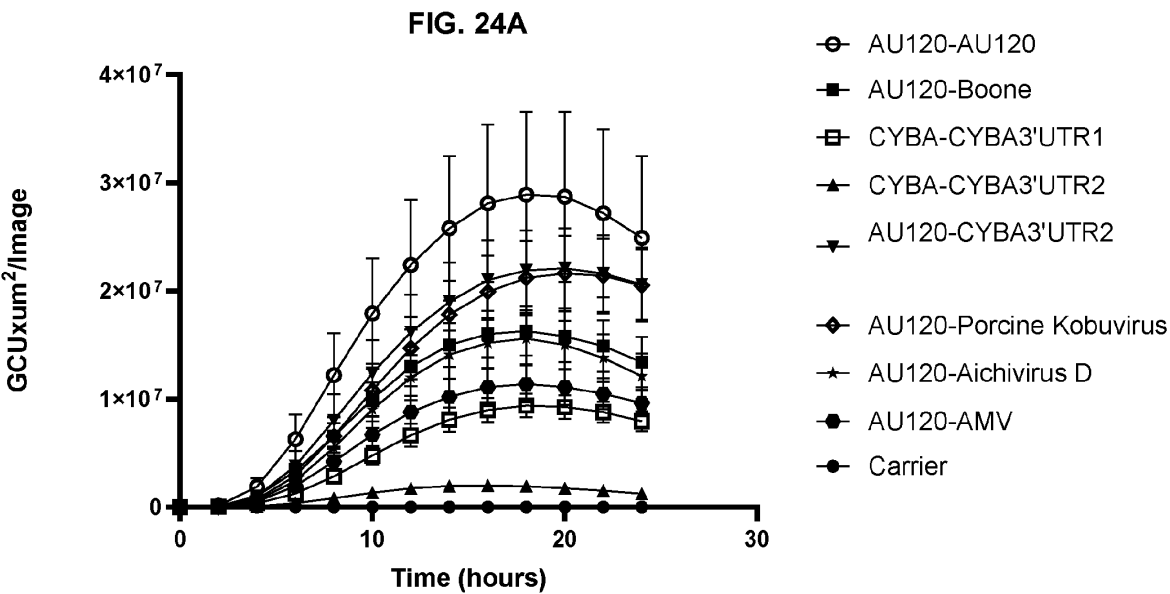


FIG. 24B

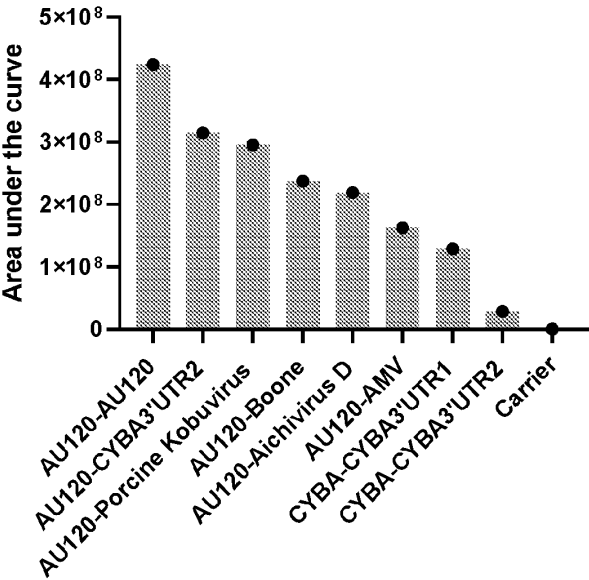


FIG. 25A

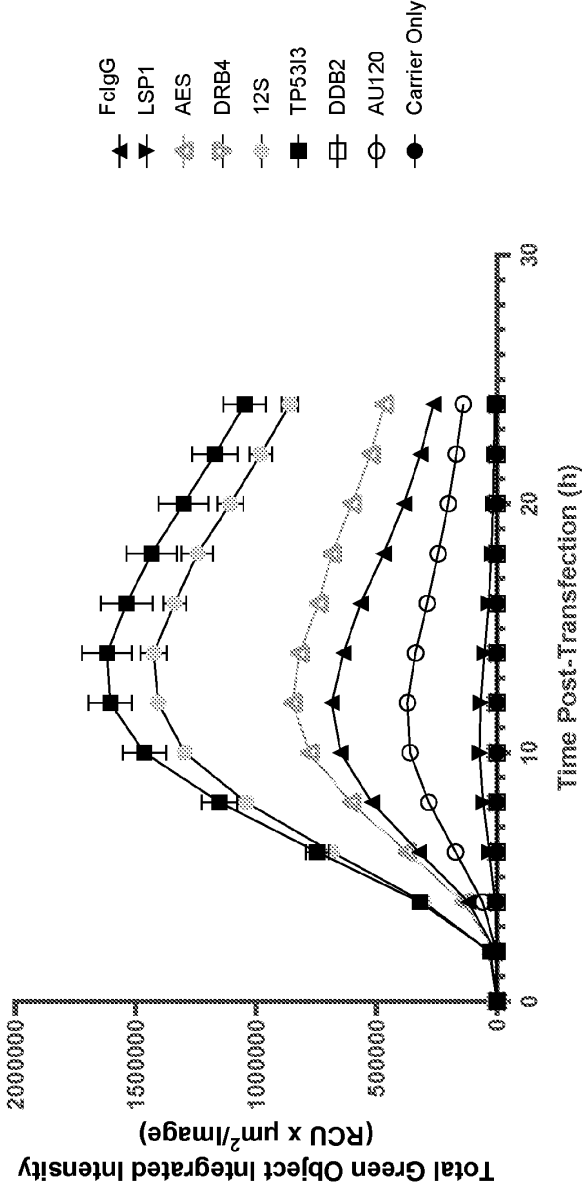


FIG. 25B

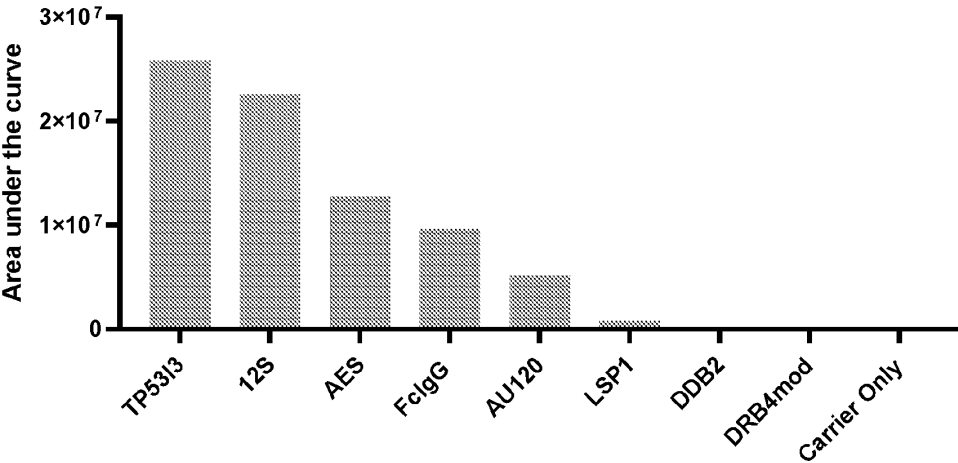


FIG. 26A

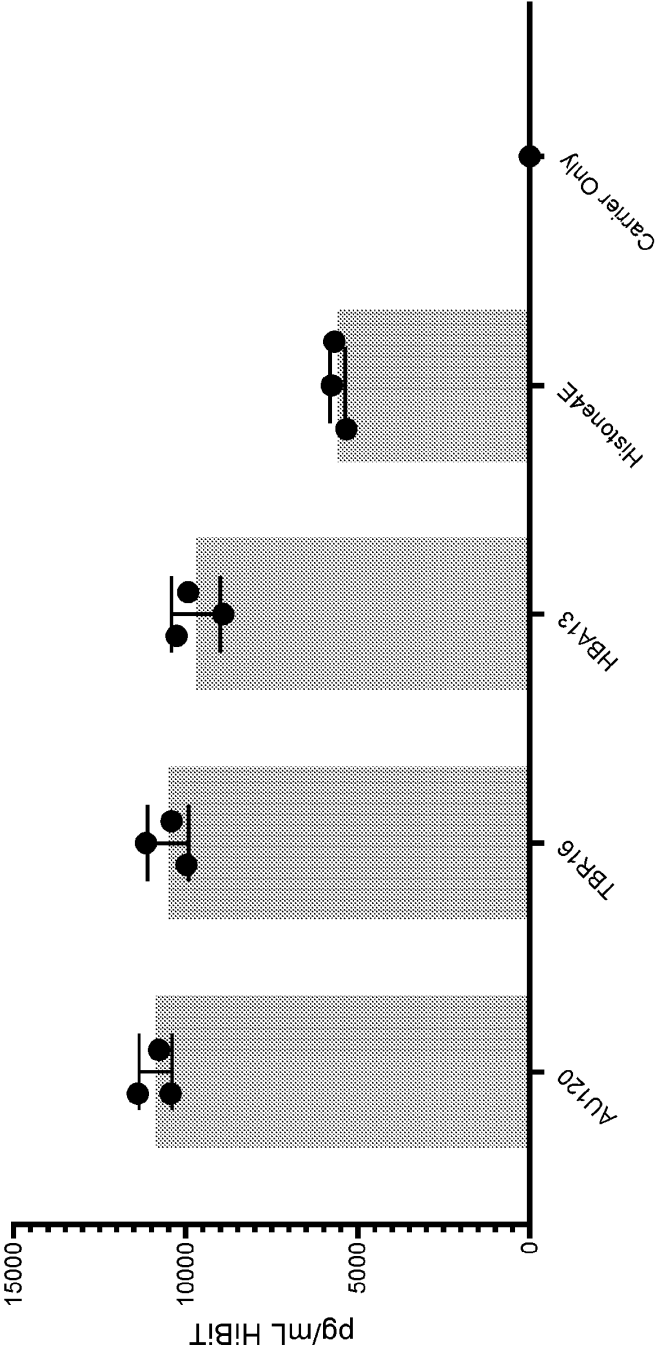


FIG. 26B

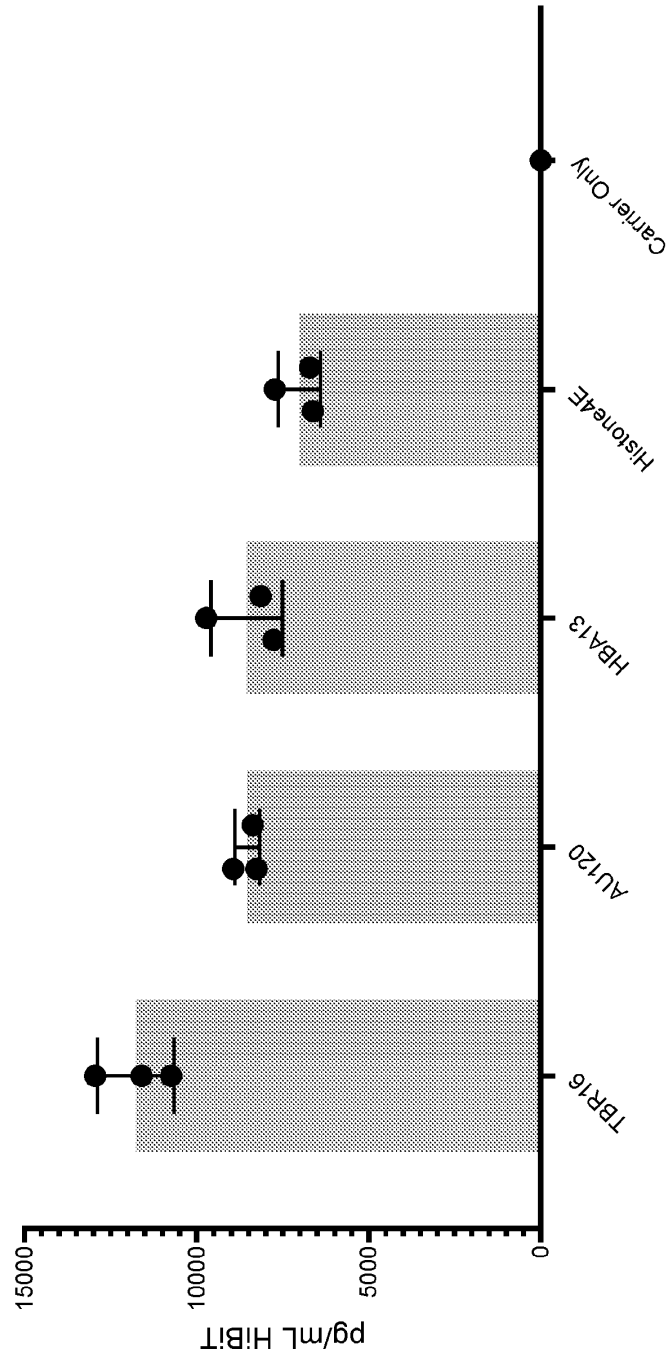


FIG. 27

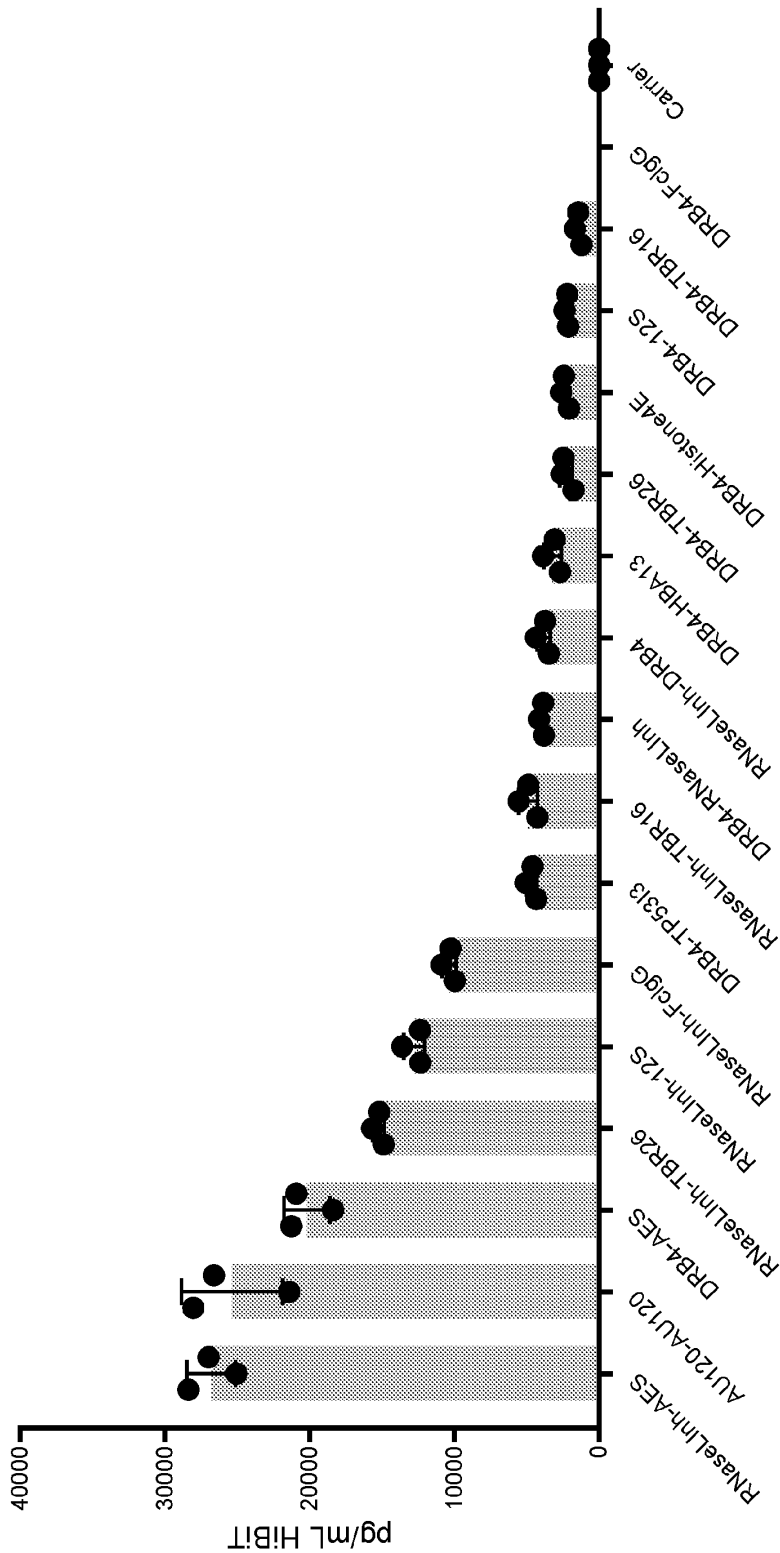


FIG. 28

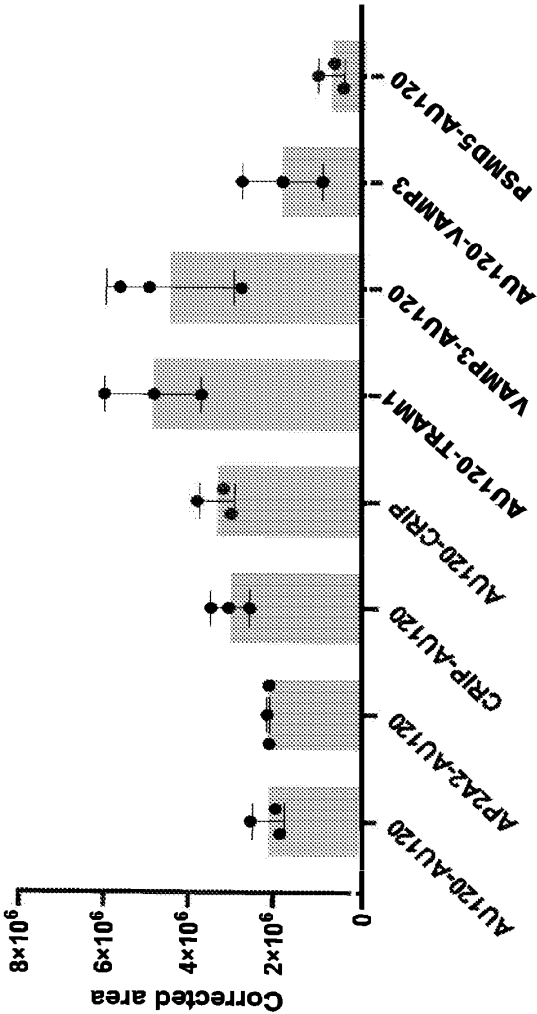


FIG. 29A

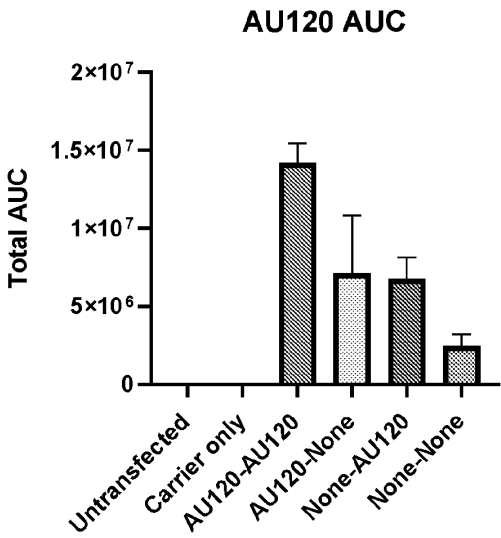


FIG. 29B

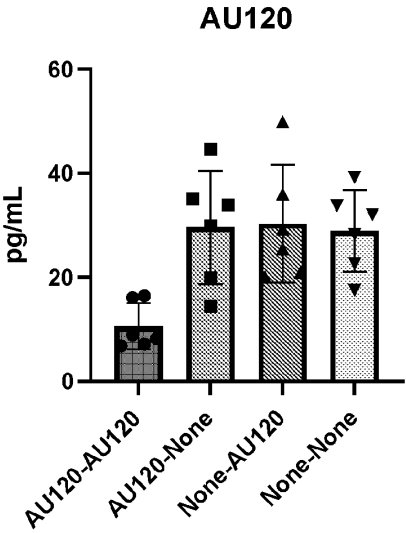


FIG. 30A

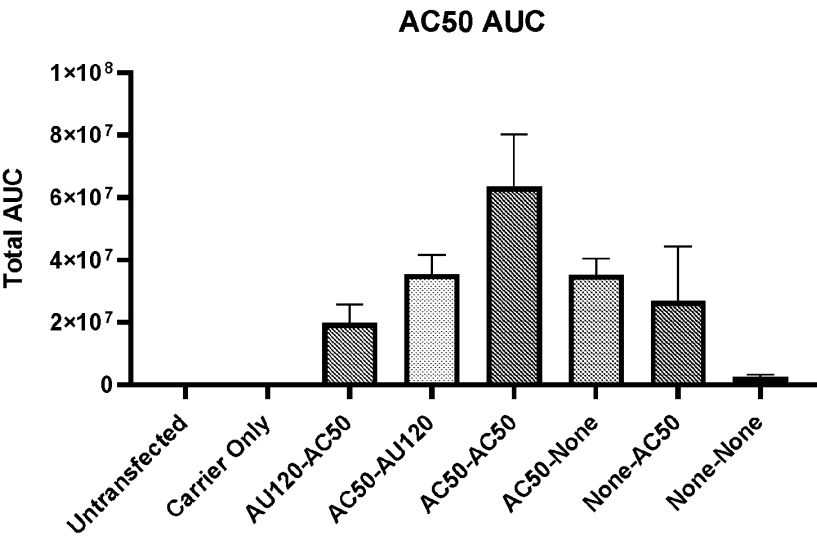


FIG. 30B

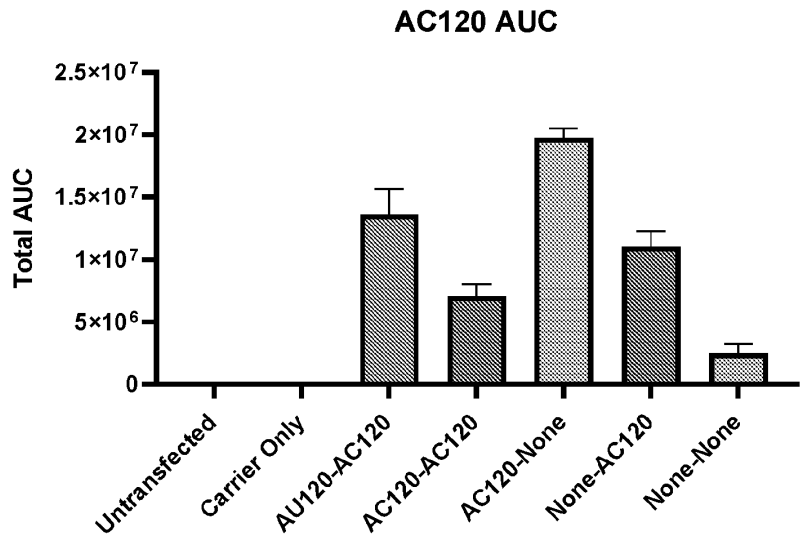


FIG. 31A

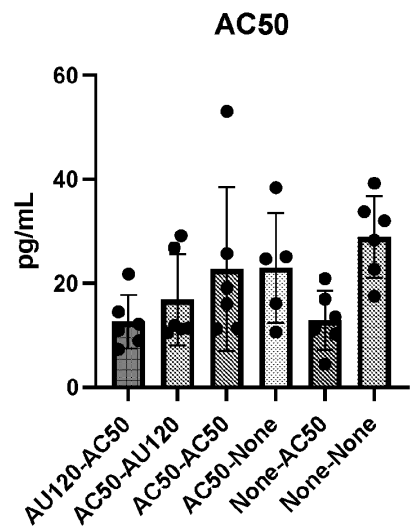


FIG. 31B

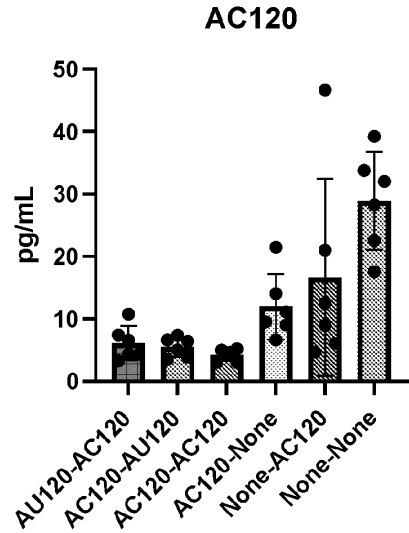


FIG. 32A

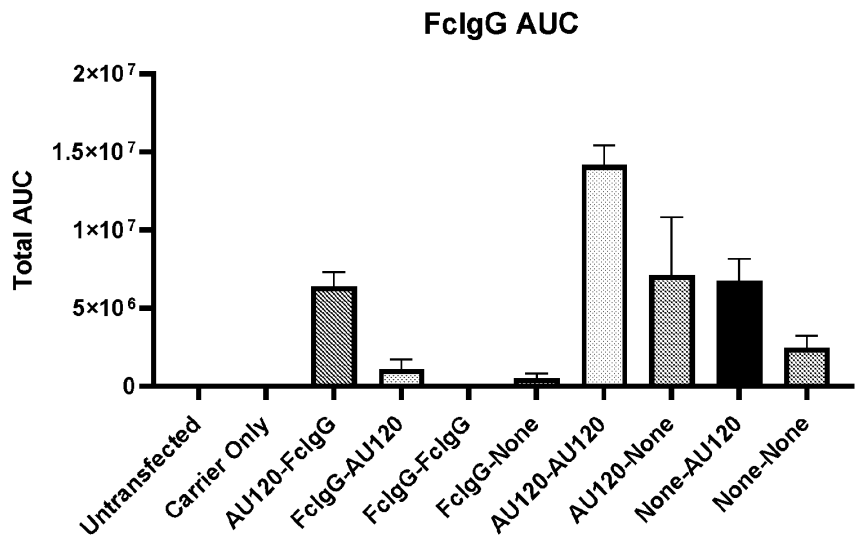


FIG. 32B

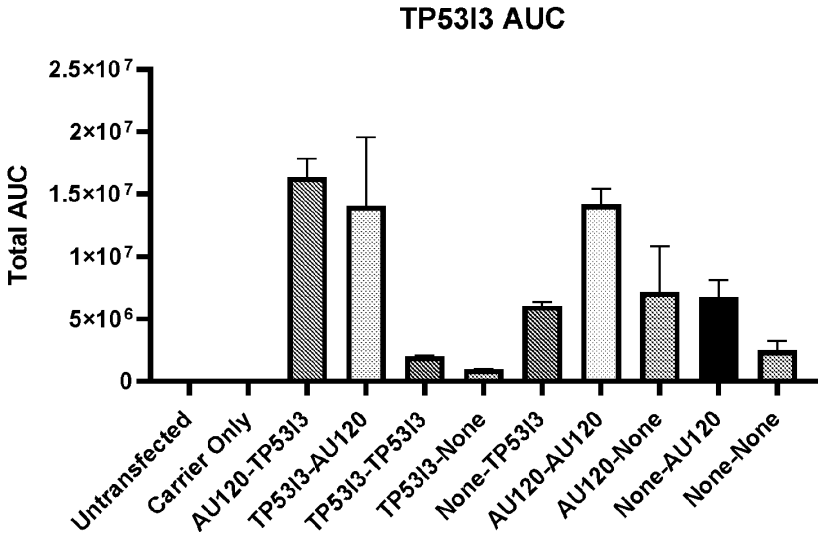


FIG. 32C

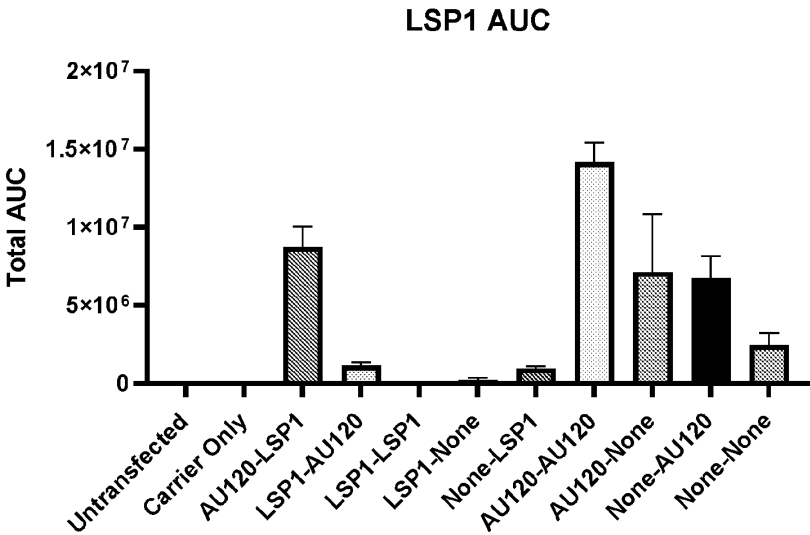


FIG. 32D

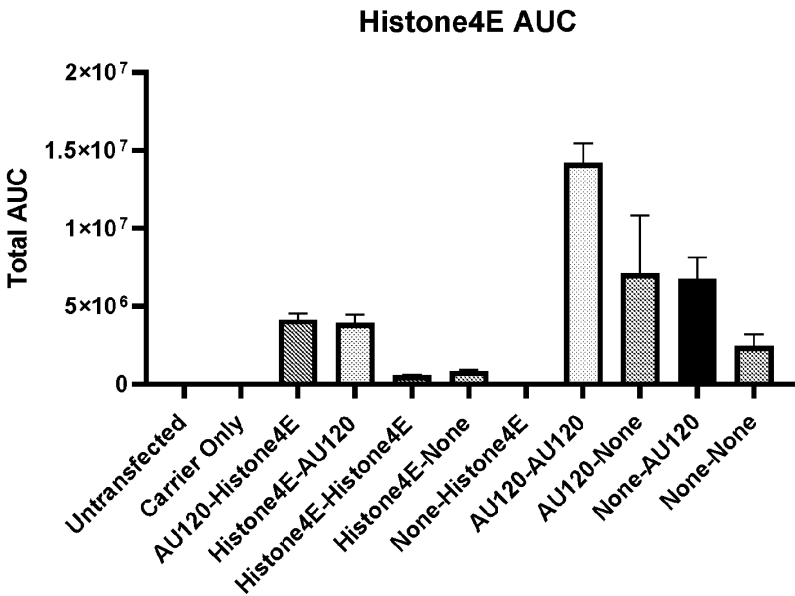


FIG. 33A

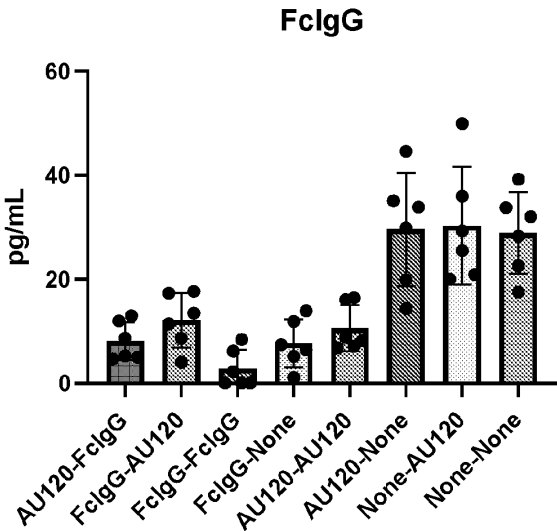


FIG. 33B

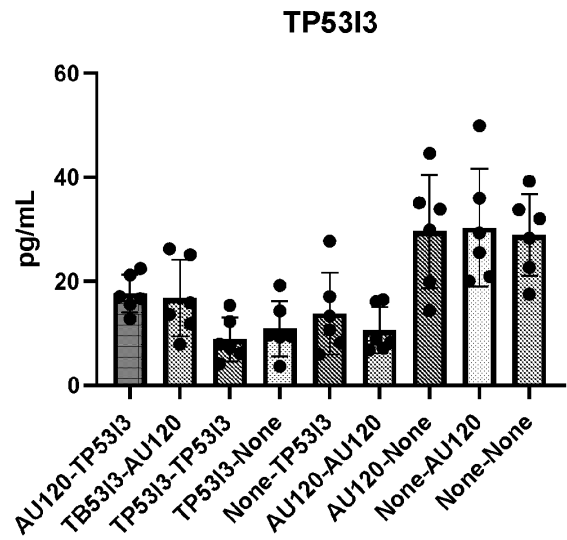


FIG. 33C

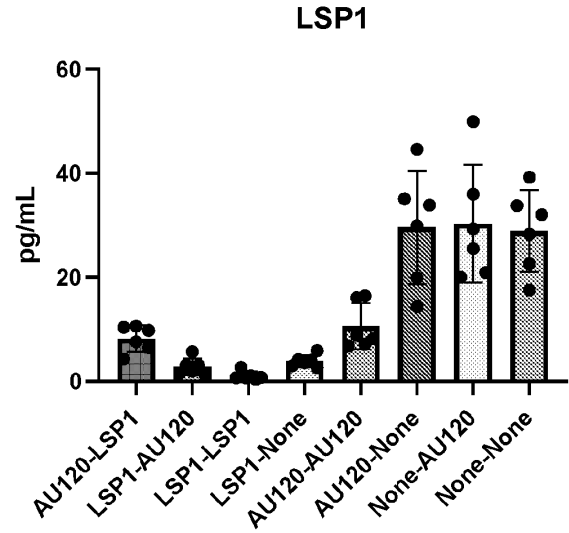


FIG. 33D

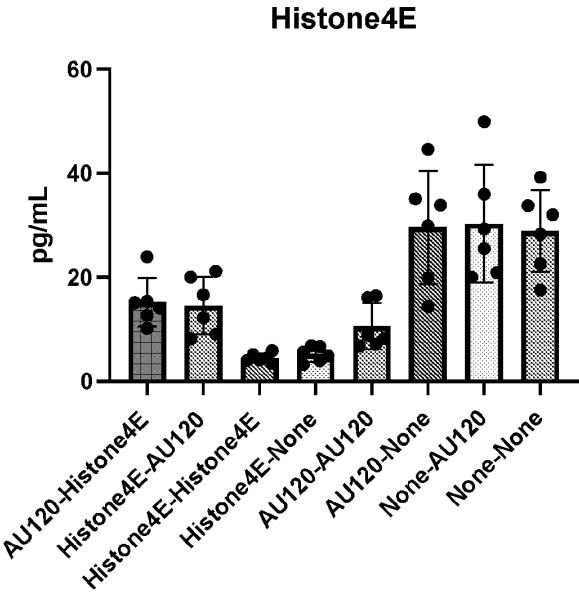


FIG. 34A

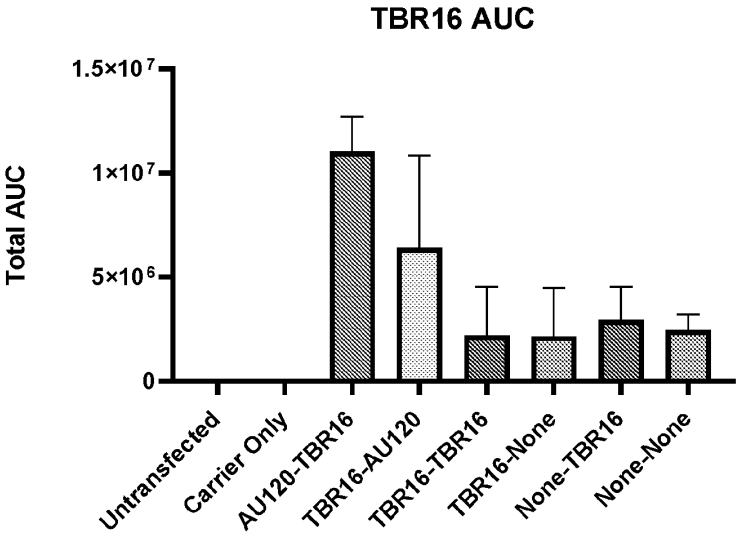


FIG. 34B

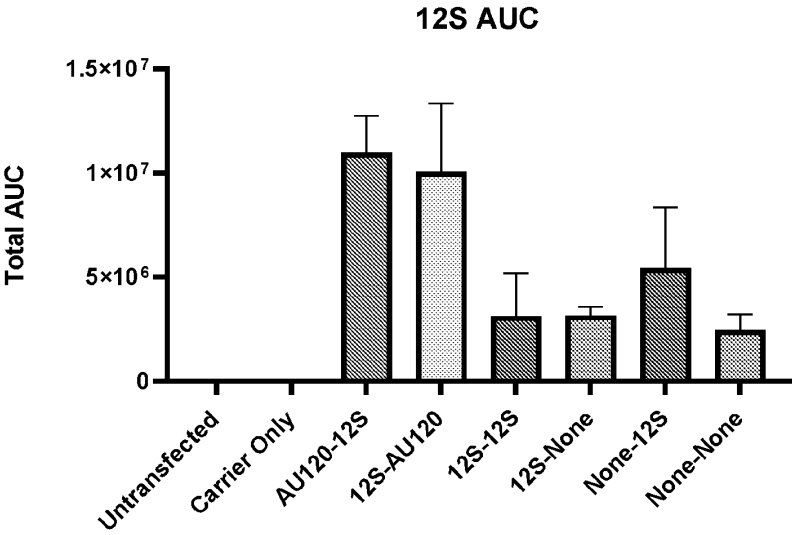


FIG. 34C

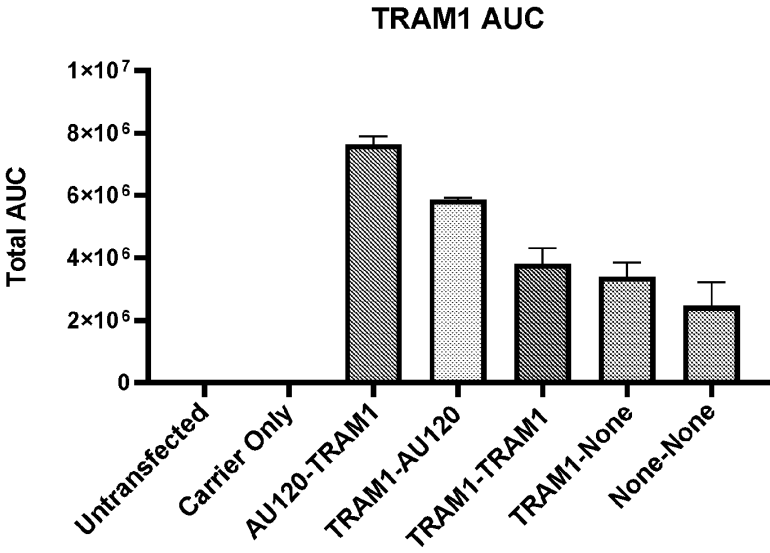


FIG. 34D

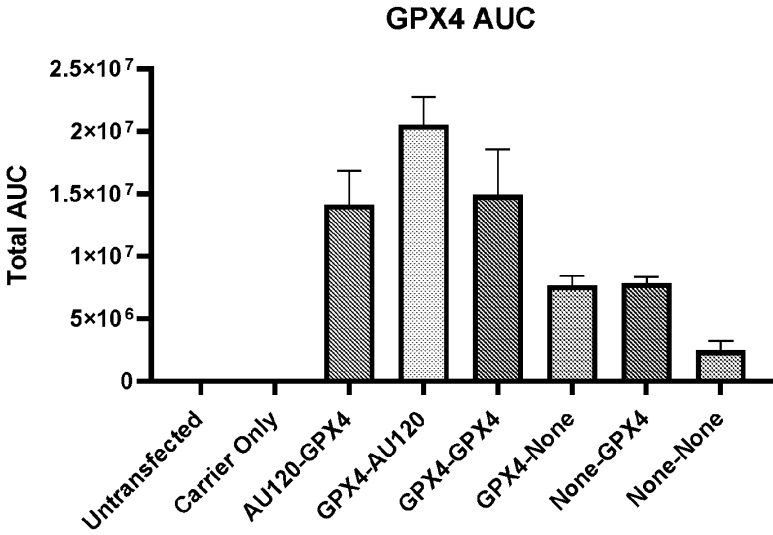


FIG. 35A

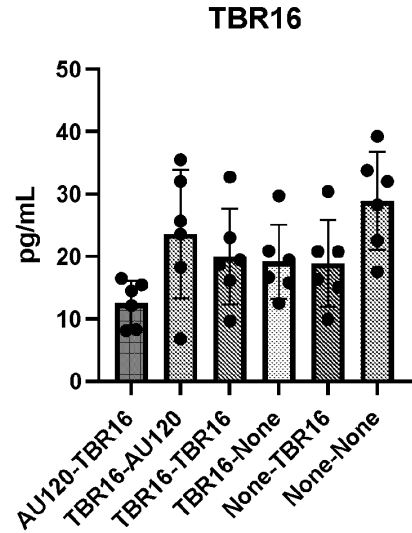


FIG. 35B

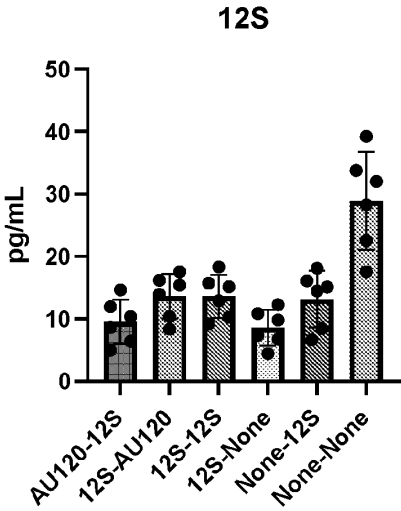


FIG. 35C

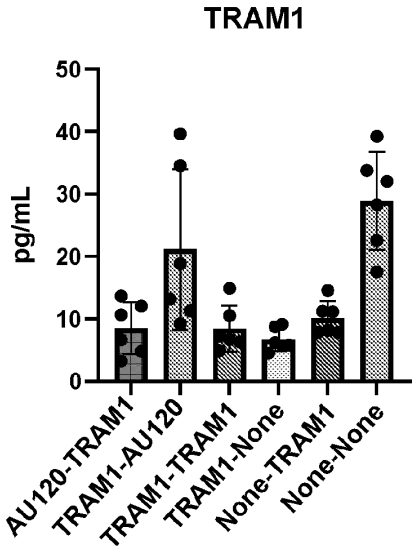


FIG. 35D

