

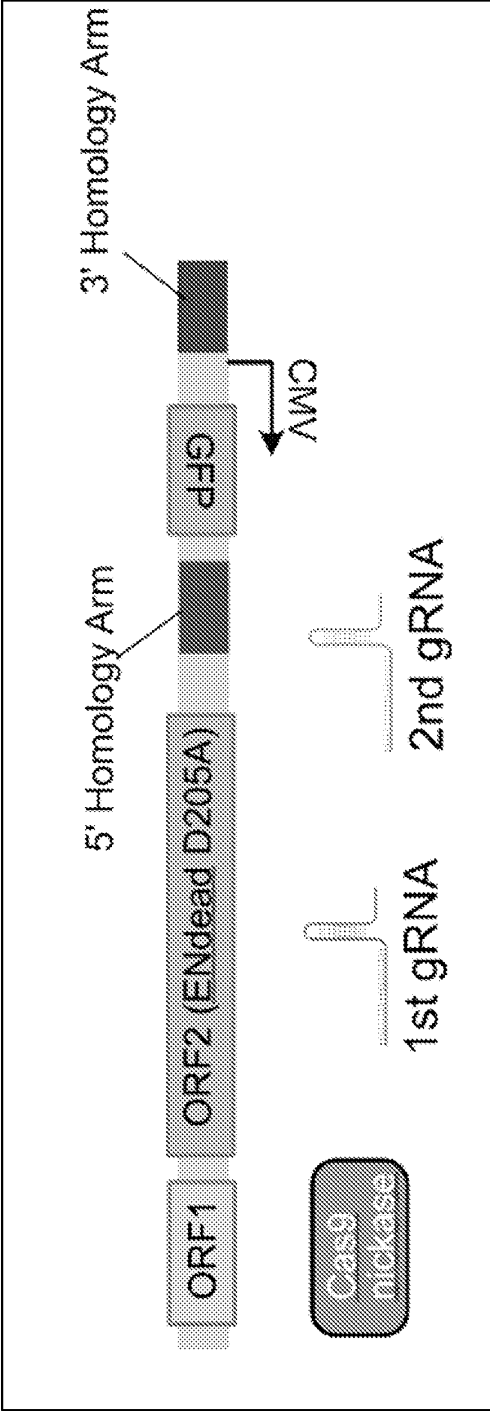


FIG. 1

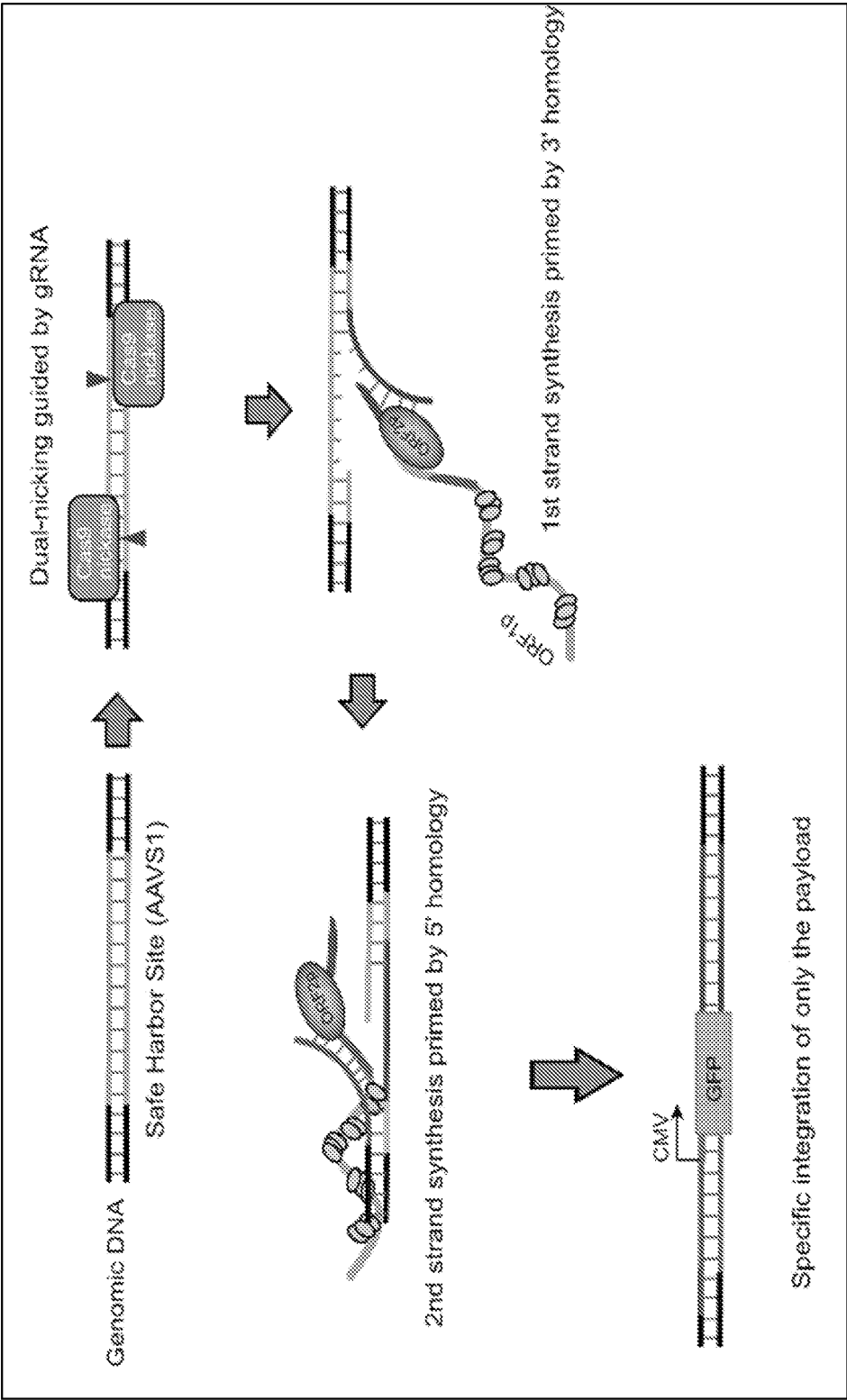


FIG. 2

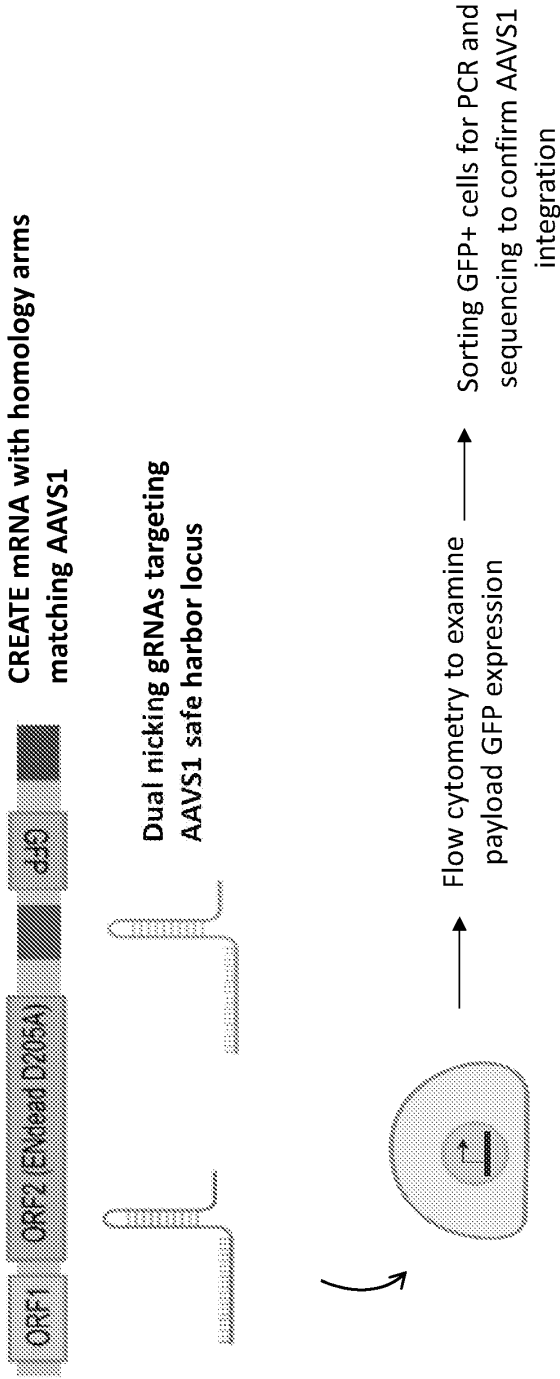


FIG. 3

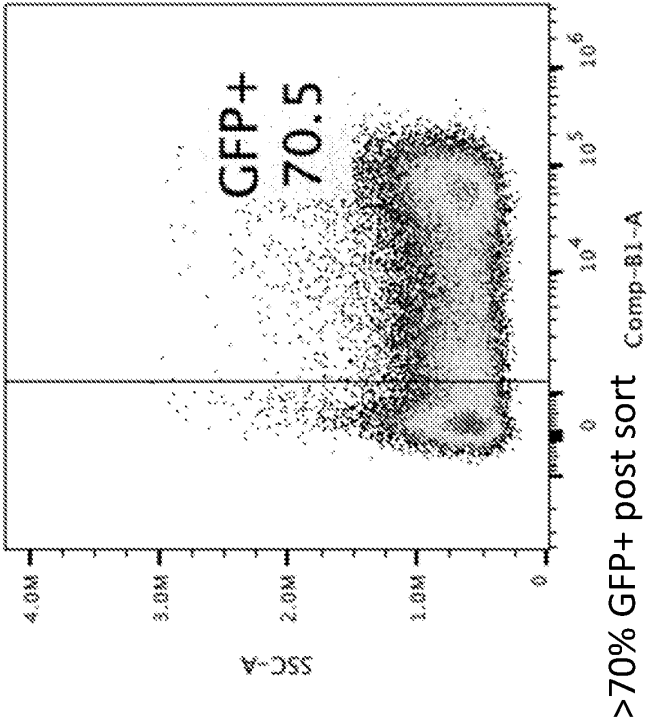


FIG. 4B

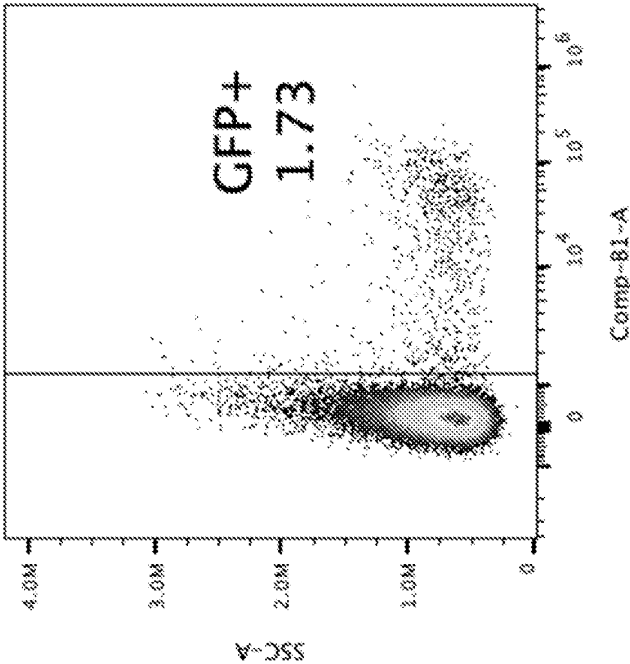


FIG. 4A

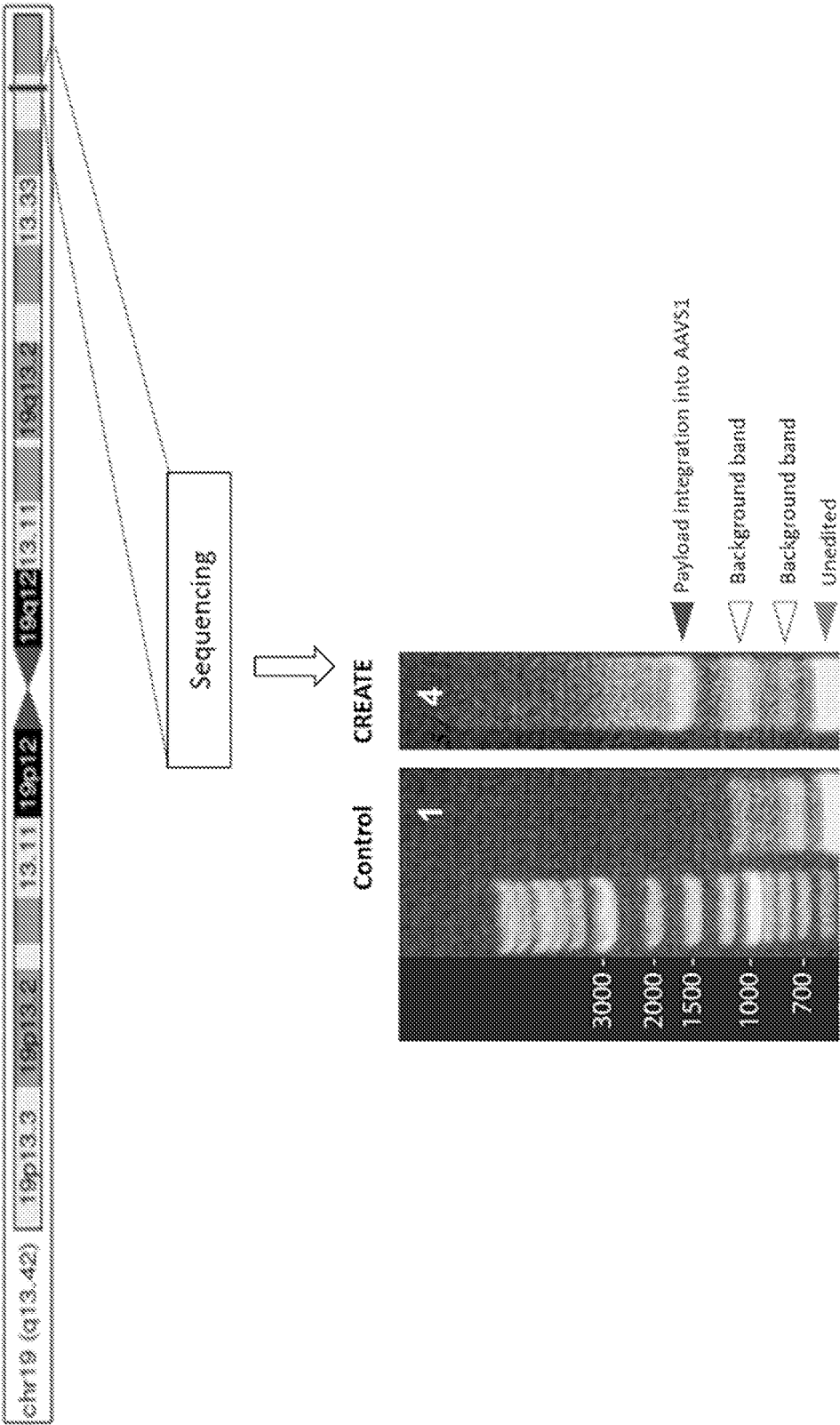


FIG. 5

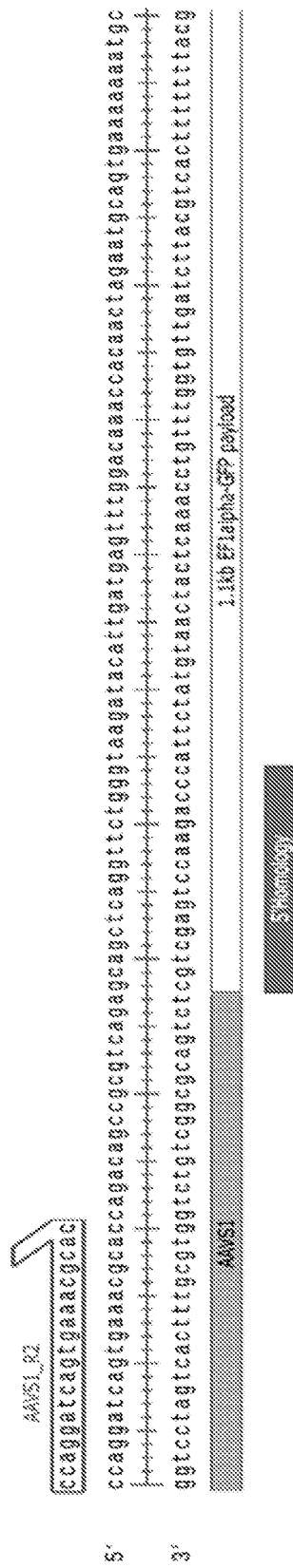


FIG. 6A

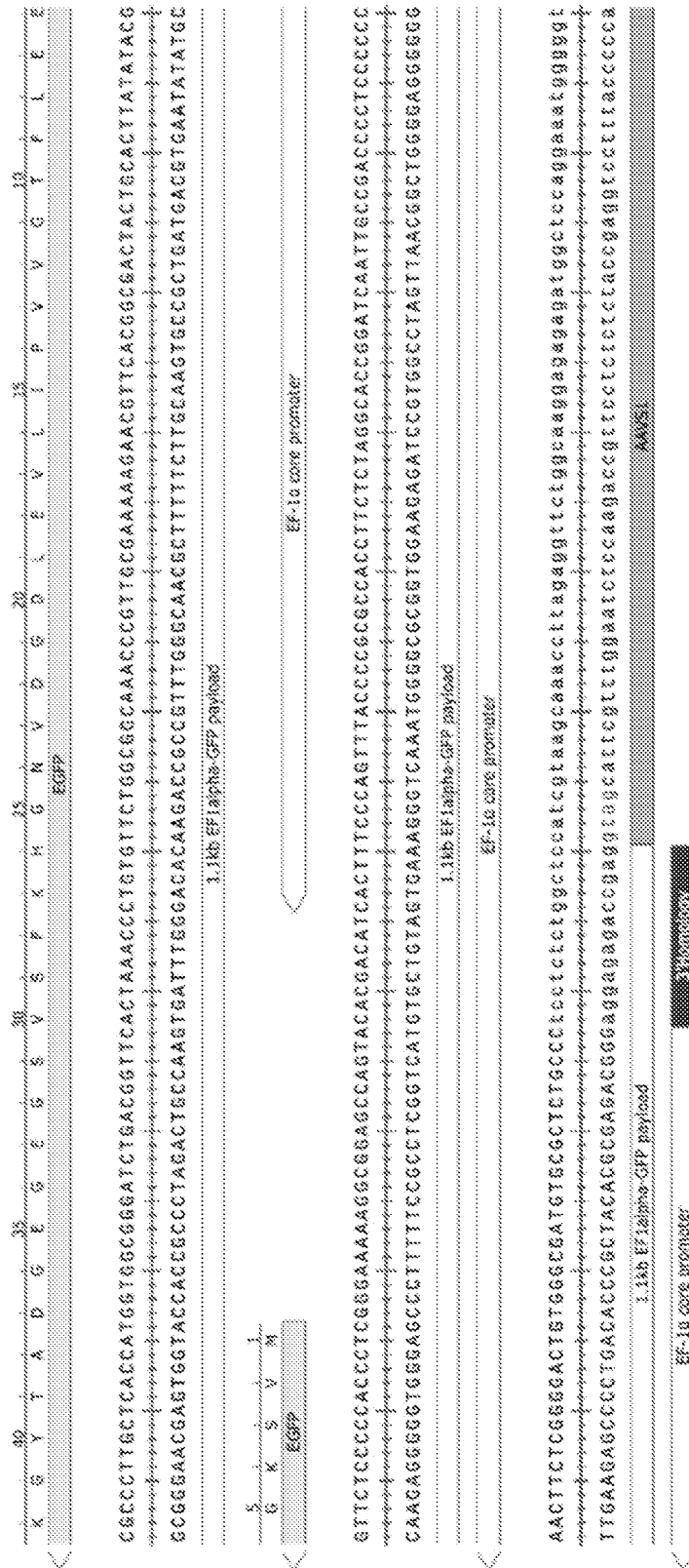
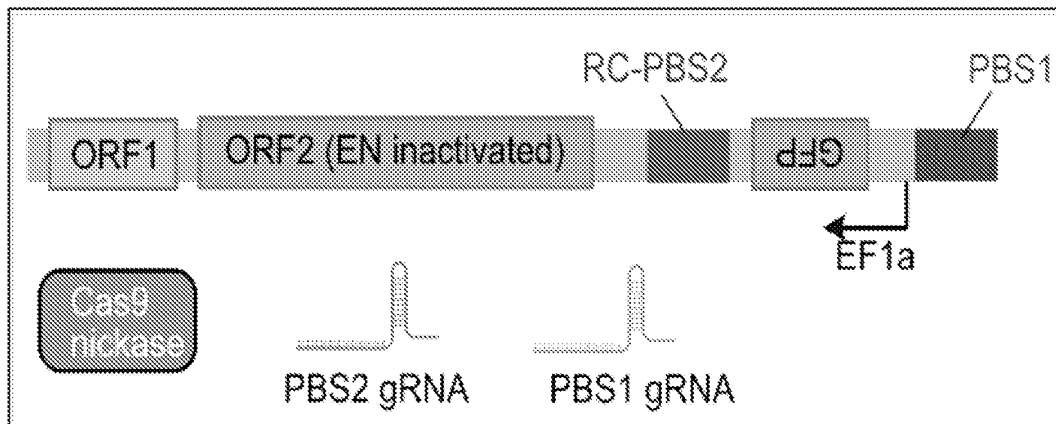
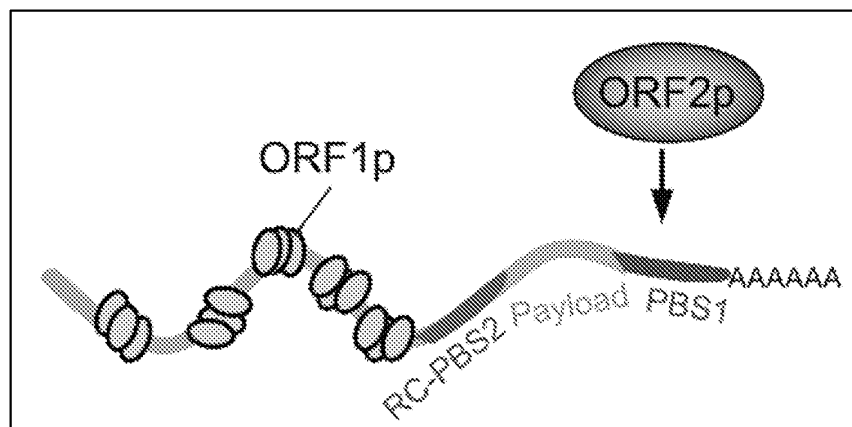
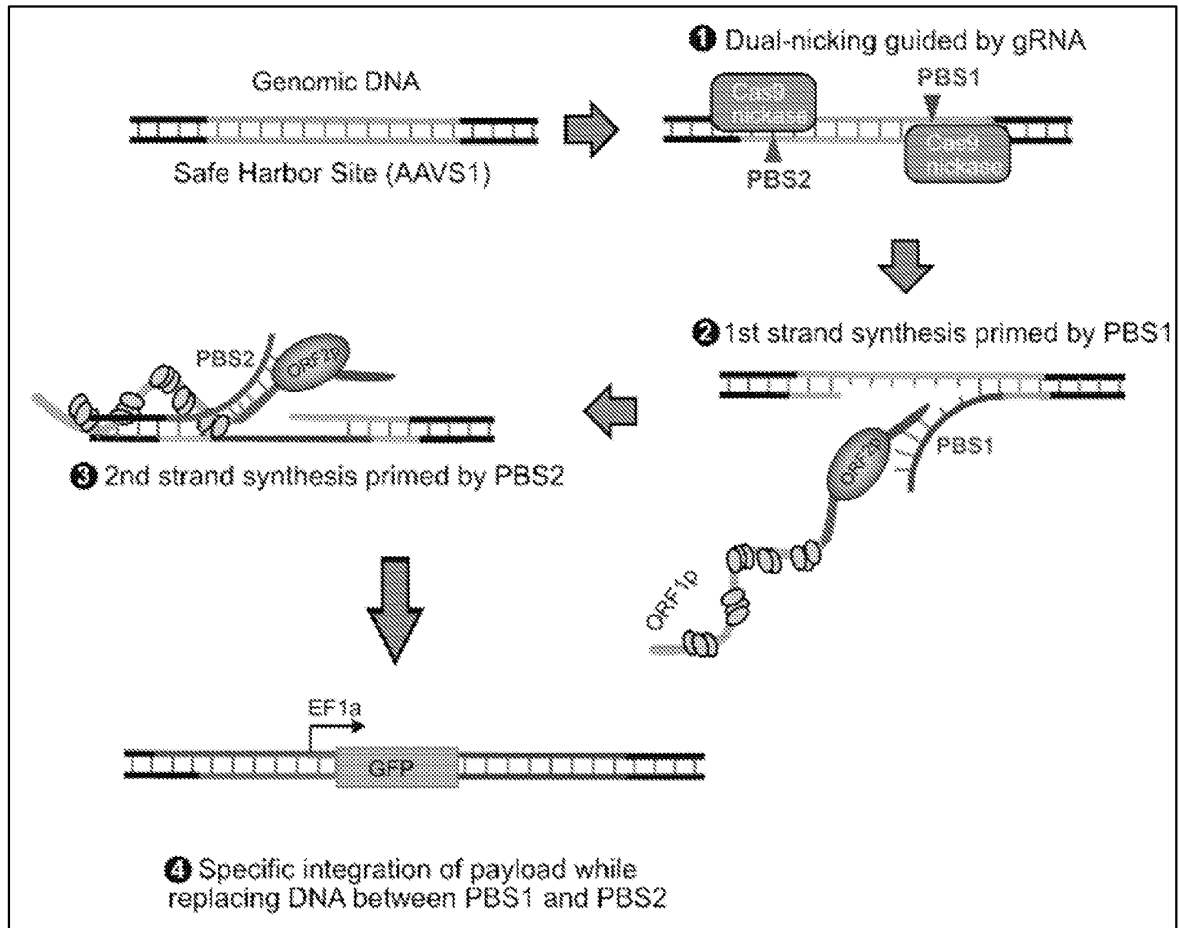


FIG. 6B

**FIG. 7A****FIG. 7B**

**FIG. 7C**

CREATE mRNA: design 1 (CREATE mRNA1)

ORF1	ORF2 (D205A EN dead)	RC-PBS2 (17bp)	Inverted GFP	PBS1 (17bp)
------	----------------------	----------------	--------------	-------------

FIG. 8A

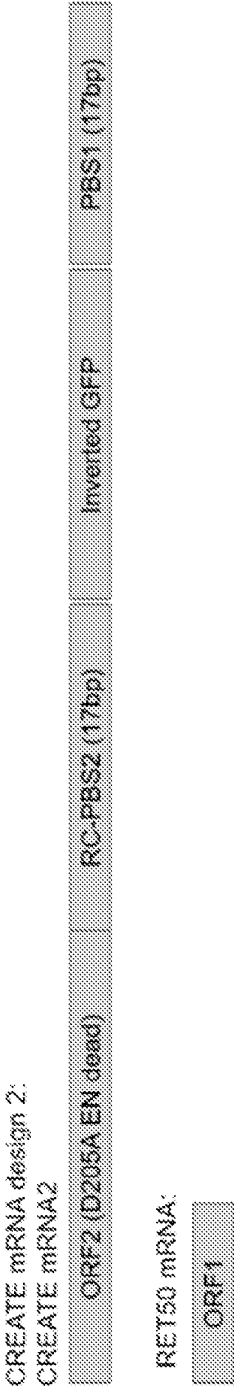


FIG. 9A

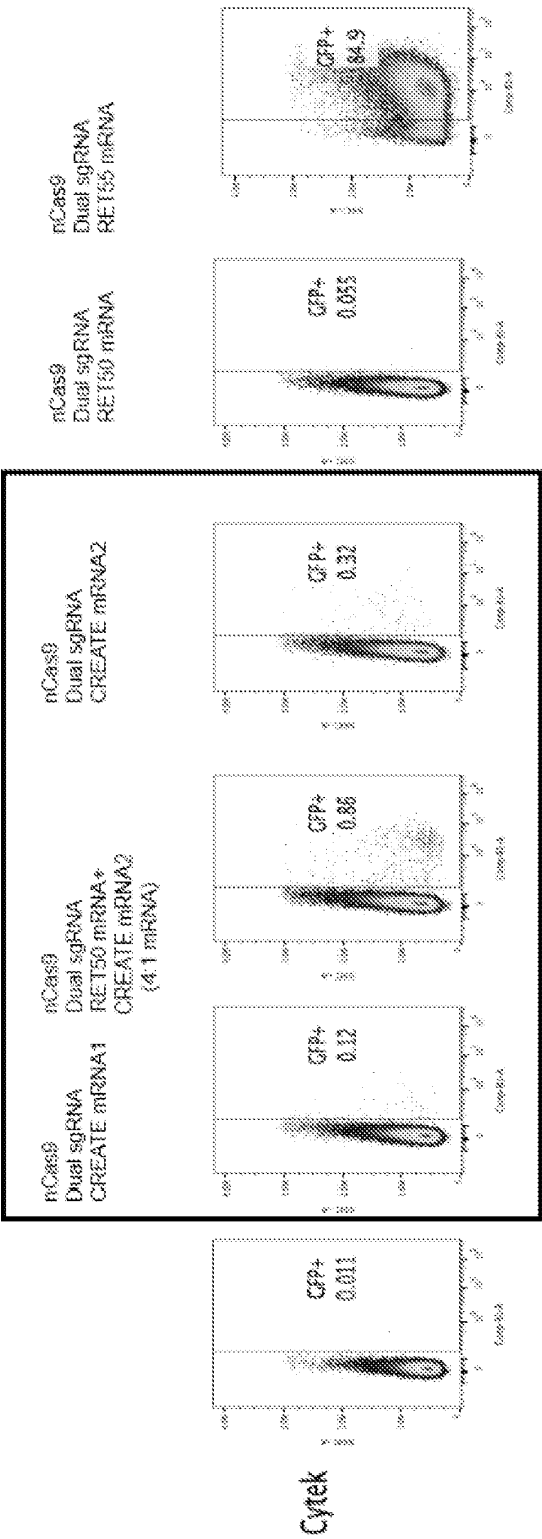


FIG. 9B

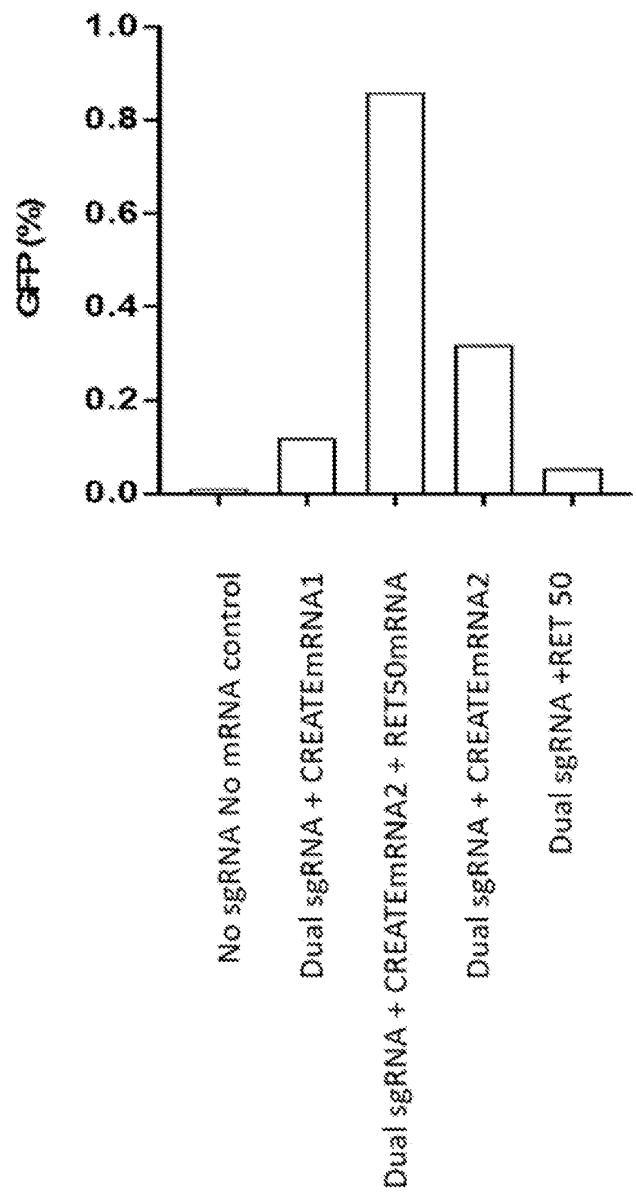


FIG. 9C

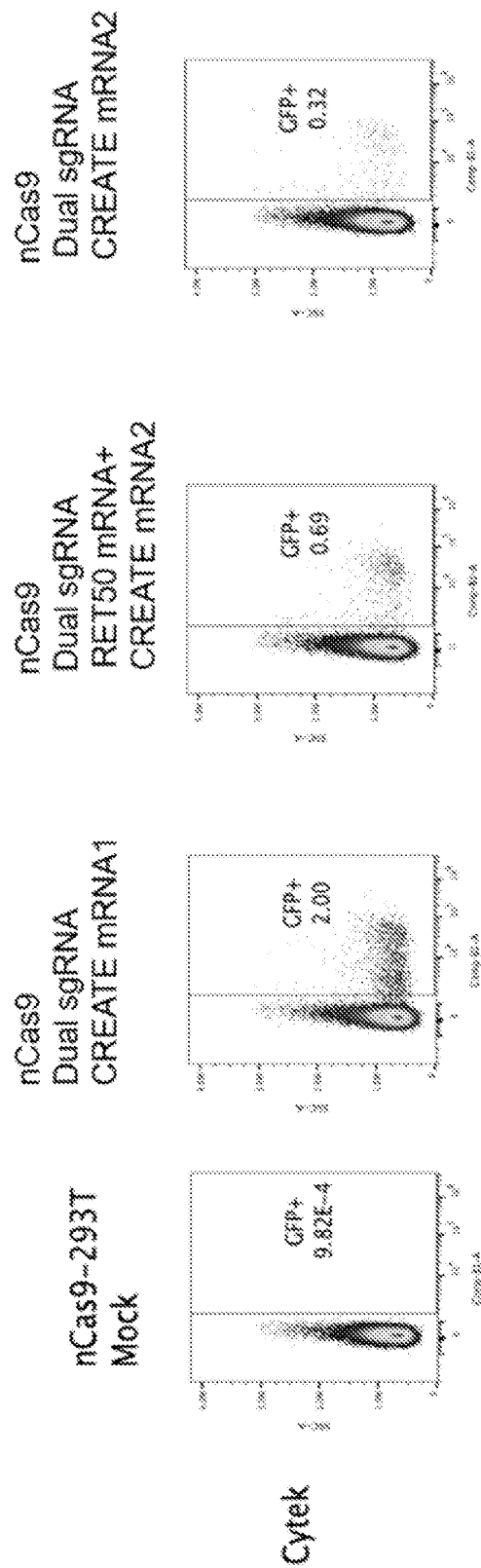


FIG. 9D

CREATE mRNA design 1:

ORF1	ORF2 (D205A EN dead)	RC-PBS2 (17bp)	Inverted GFP	PBS1 (17bp)
------	----------------------	----------------	--------------	-------------

FIG. 10A

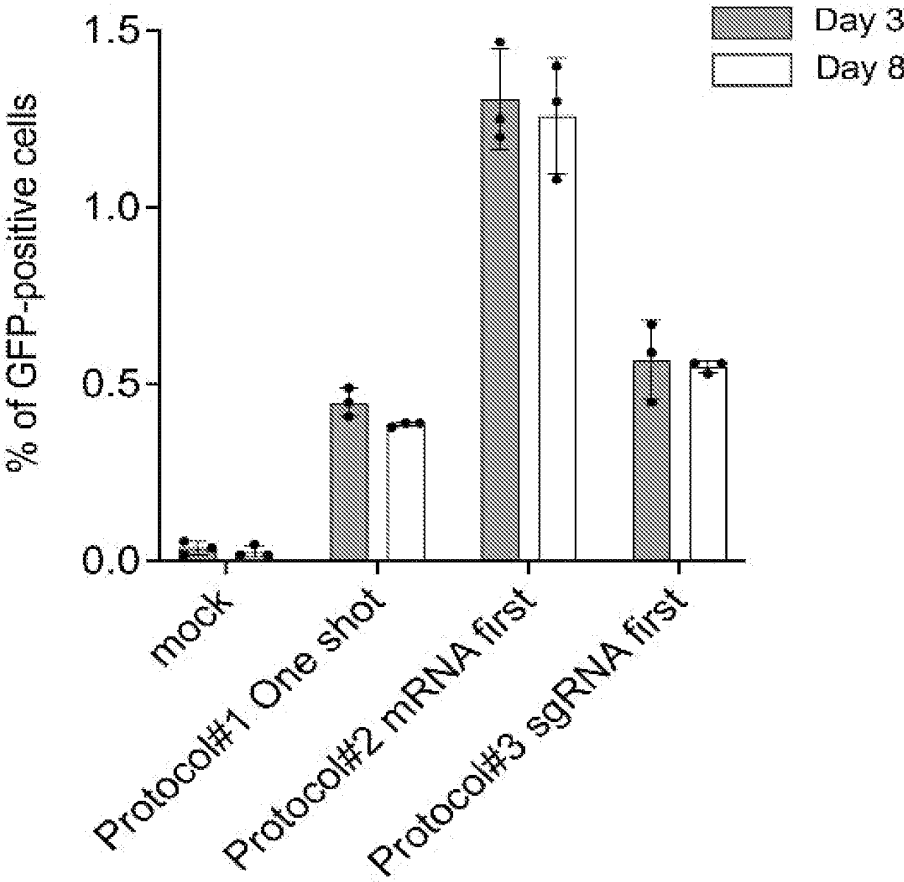


FIG. 10B

CREATE mRNA design 1:

ORF1	ORF2 (D205A EN dead)	RC-PBS2 (17bp)	Inverted GFP	PBS1 (17bp)
------	----------------------	----------------	--------------	-------------

FIG. 11A

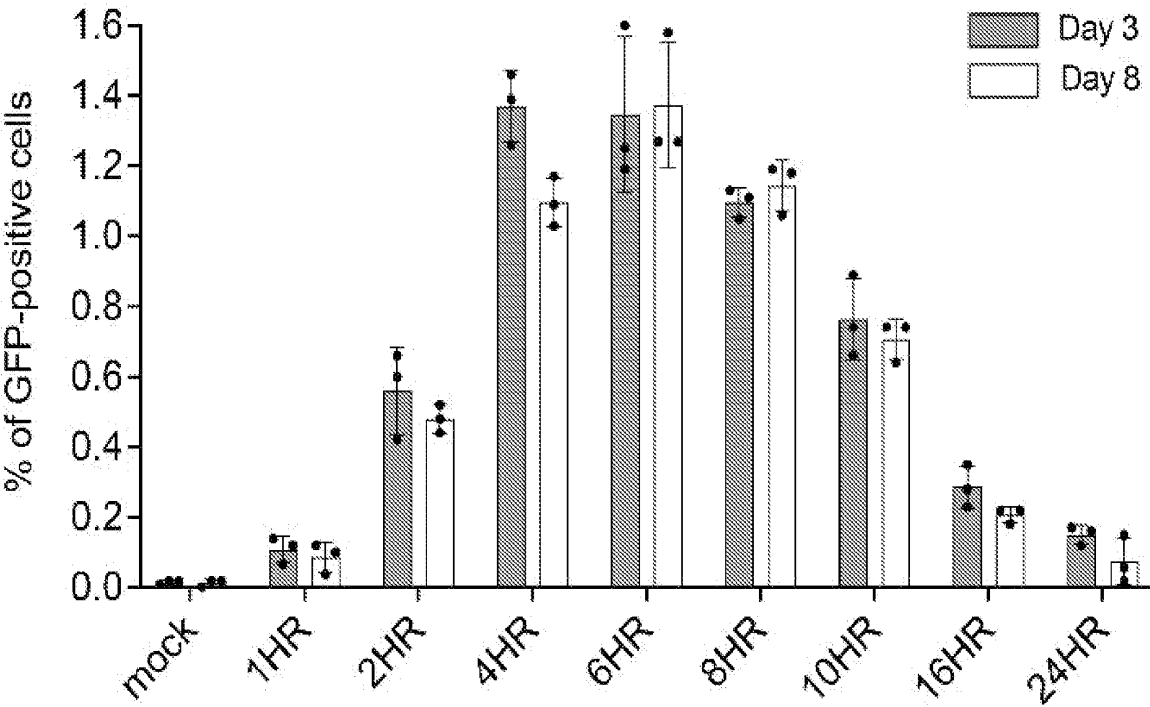


FIG. 11B

Protocol #2
CREATE mRNA design 1:

ORF1	ORF2 (D205A EN dead)	RC-PBS2 (17bp)	Inverted GFP	PBS1 (17bp)
------	----------------------	----------------	--------------	-------------

FIG. 12A

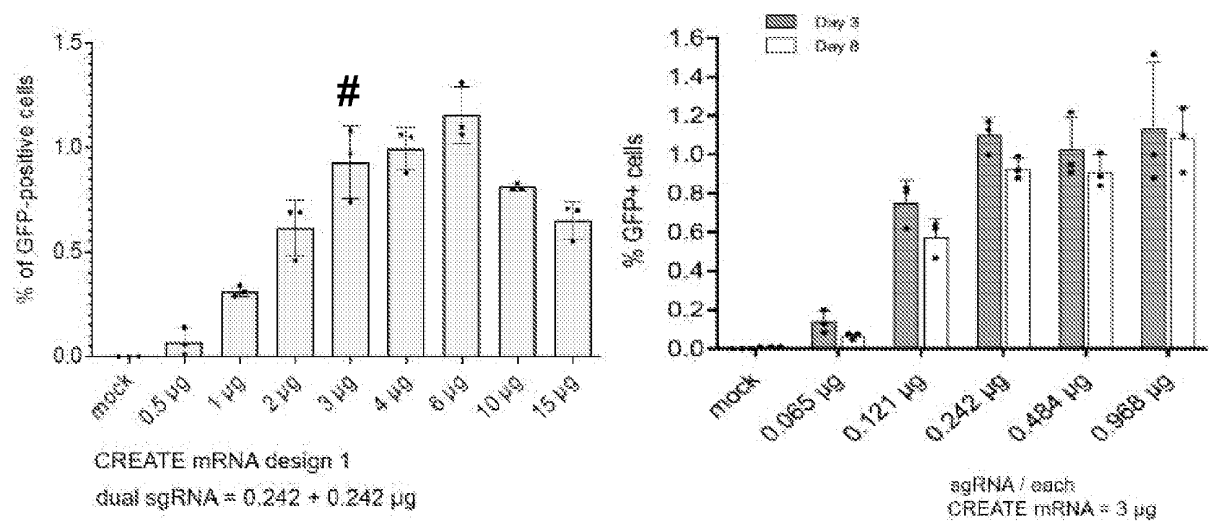


FIG. 12B

CREATE mRNA design 1:

ORF1	ORF2 (D205A EN dead)	RC-PBS2 (17bp)	Inverted GFP	PBS1 (17bp)
------	----------------------	----------------	--------------	-------------

Cas9 nickase mRNA (nCas9) construct:

Cas9 nickase (H840A)

FIG. 13A

CYTEK flow analysis of Day 3

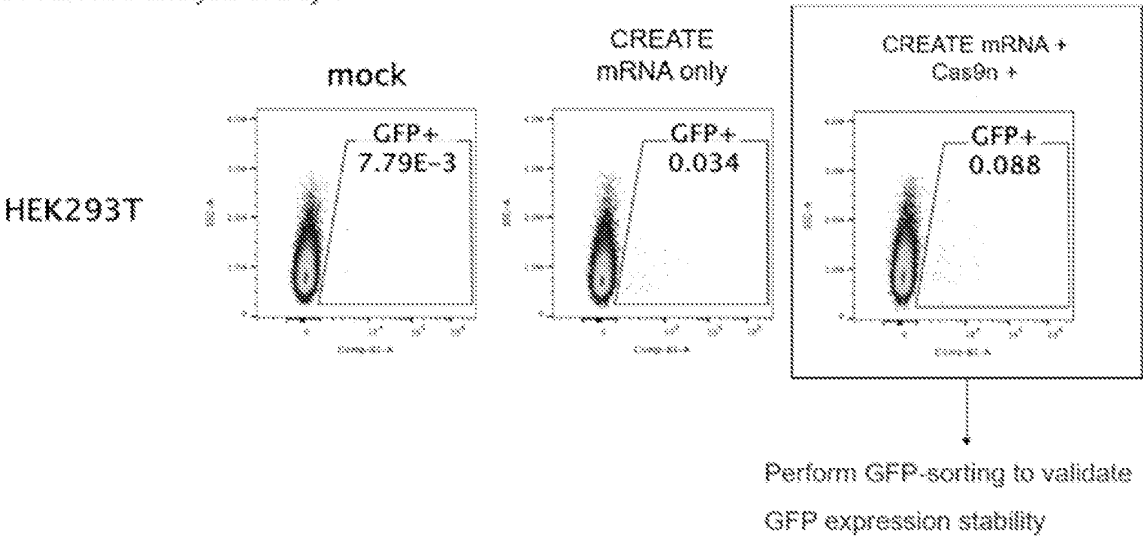


FIG. 13B

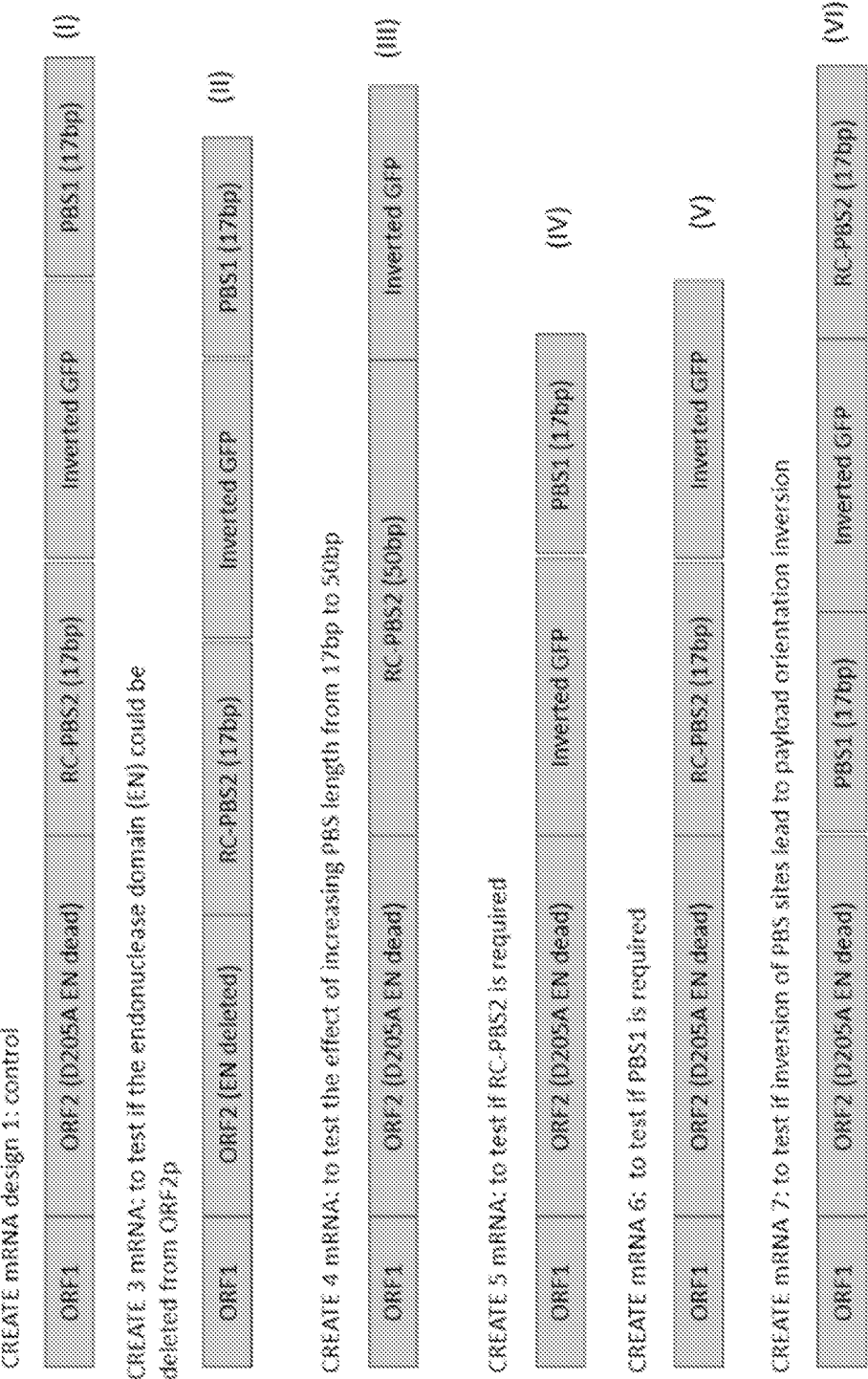


FIG. 14A

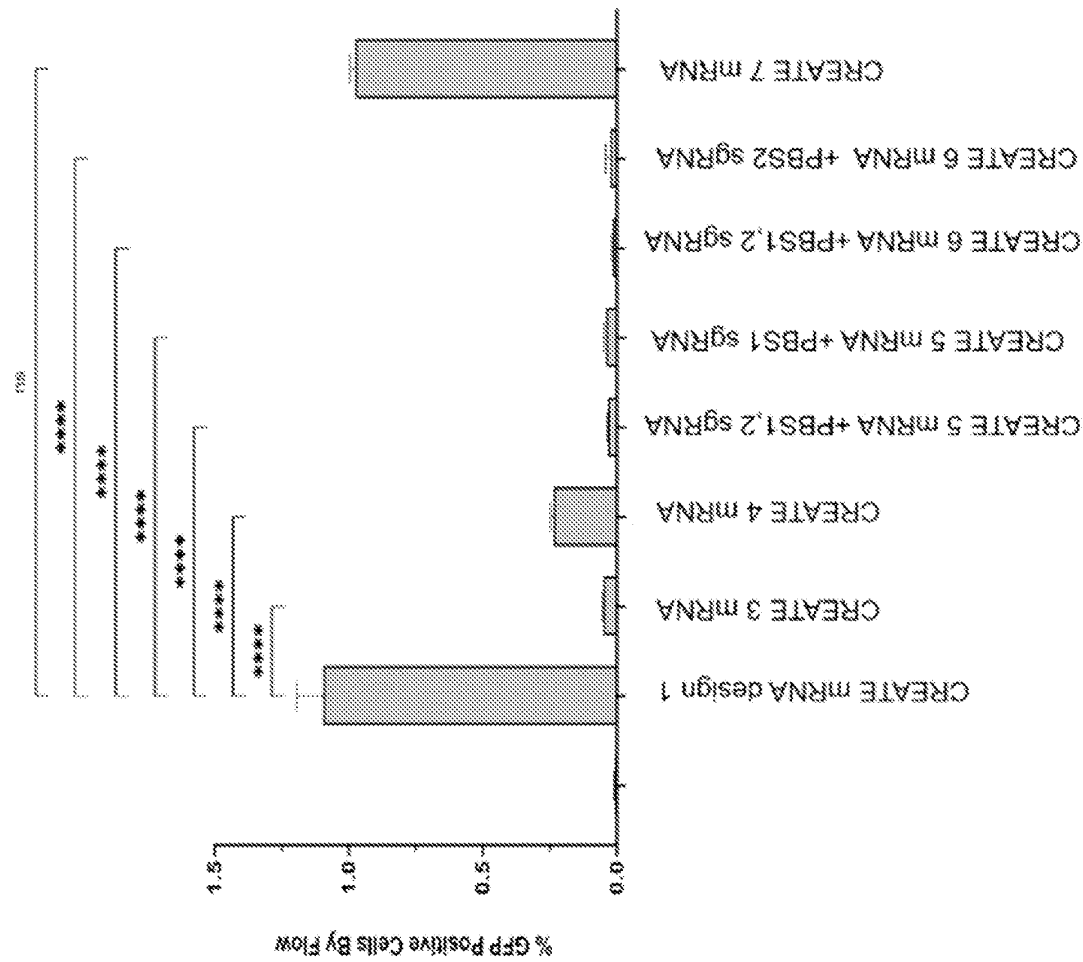
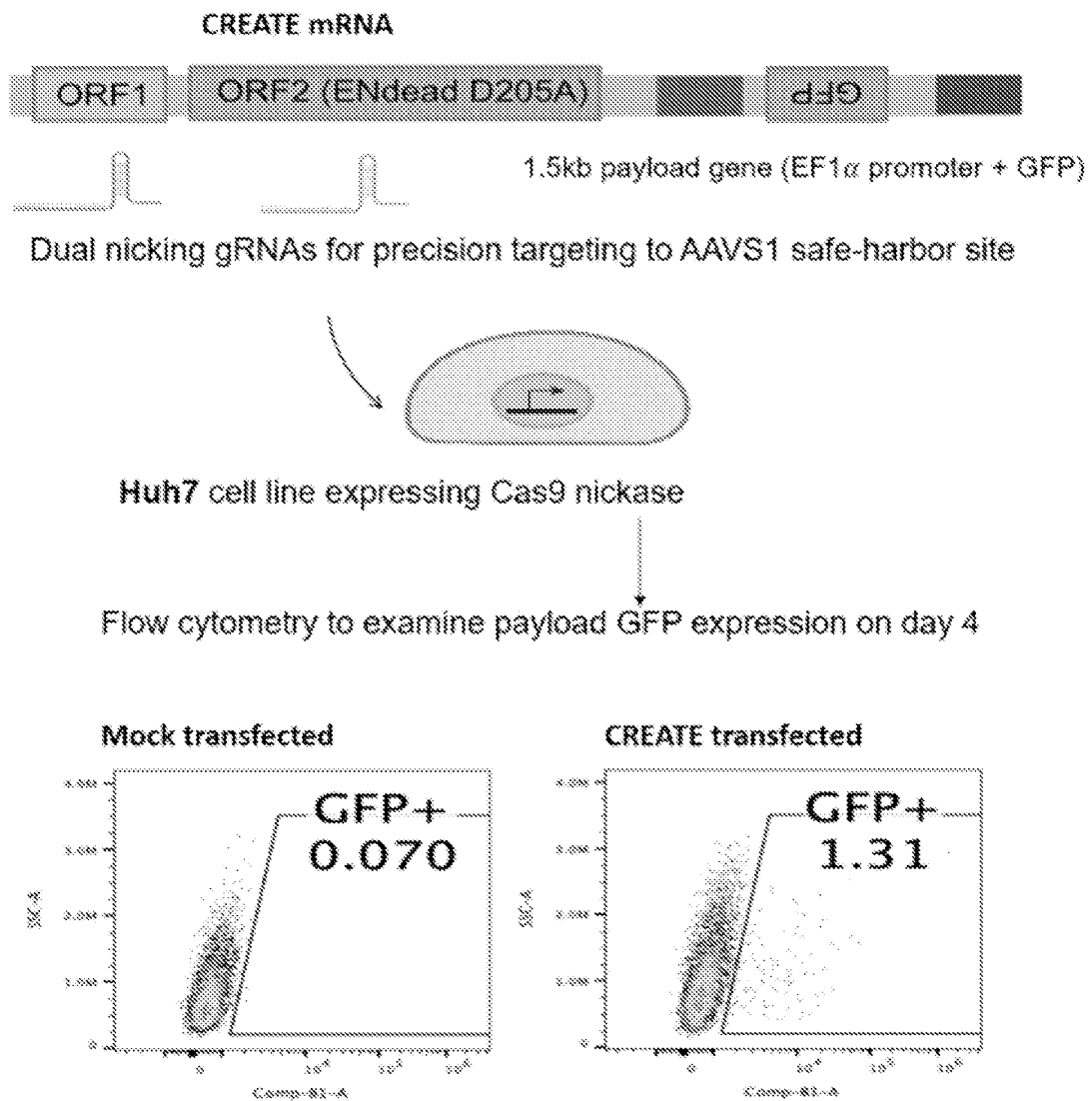


FIG. 14B

**FIG. 15**

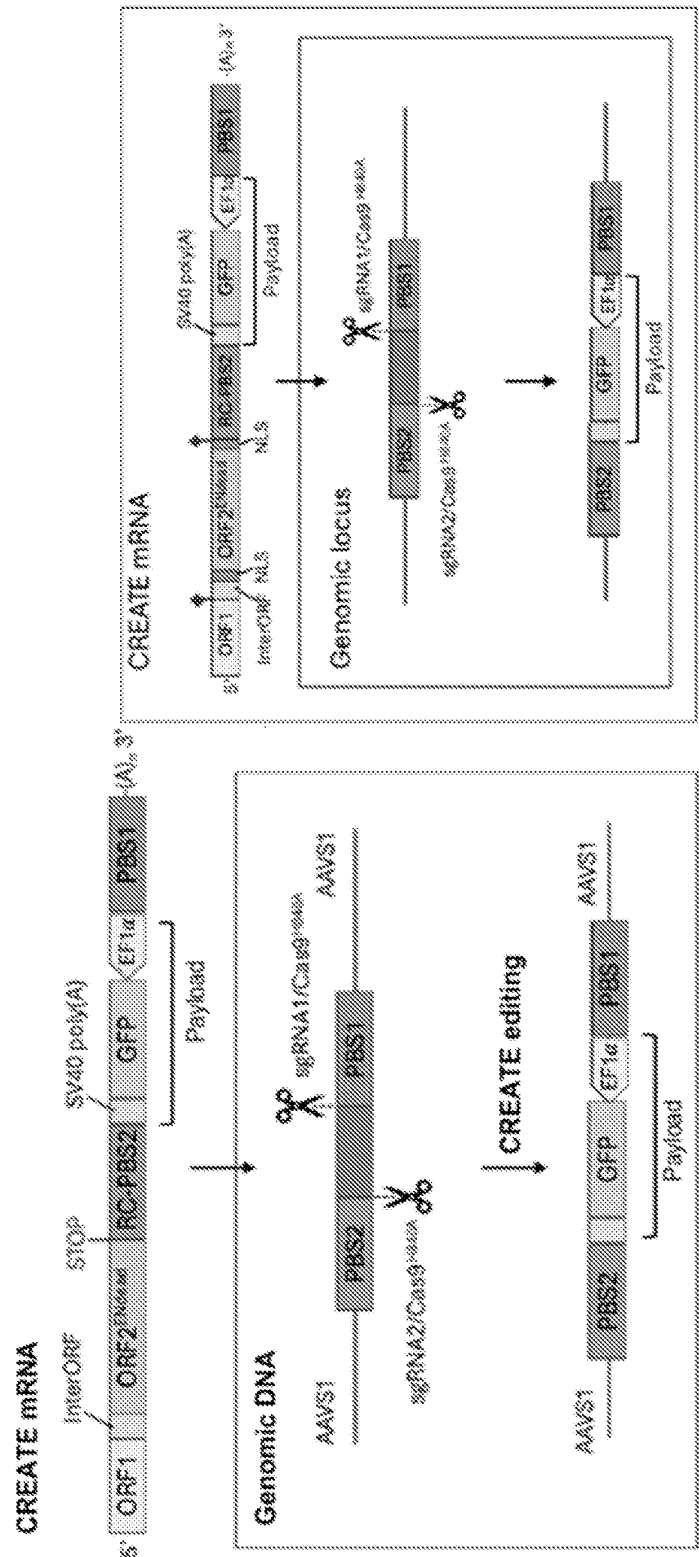


FIG. 16A

FIG. 16B

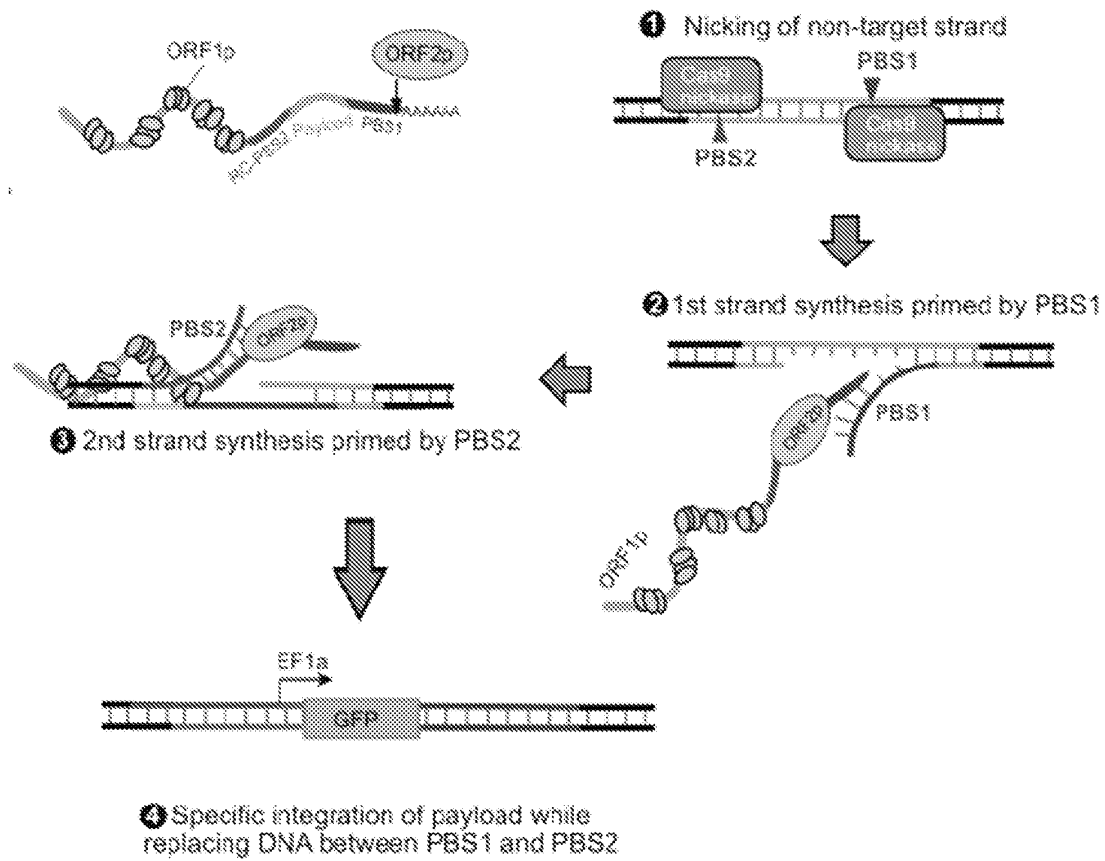


FIG. 16C

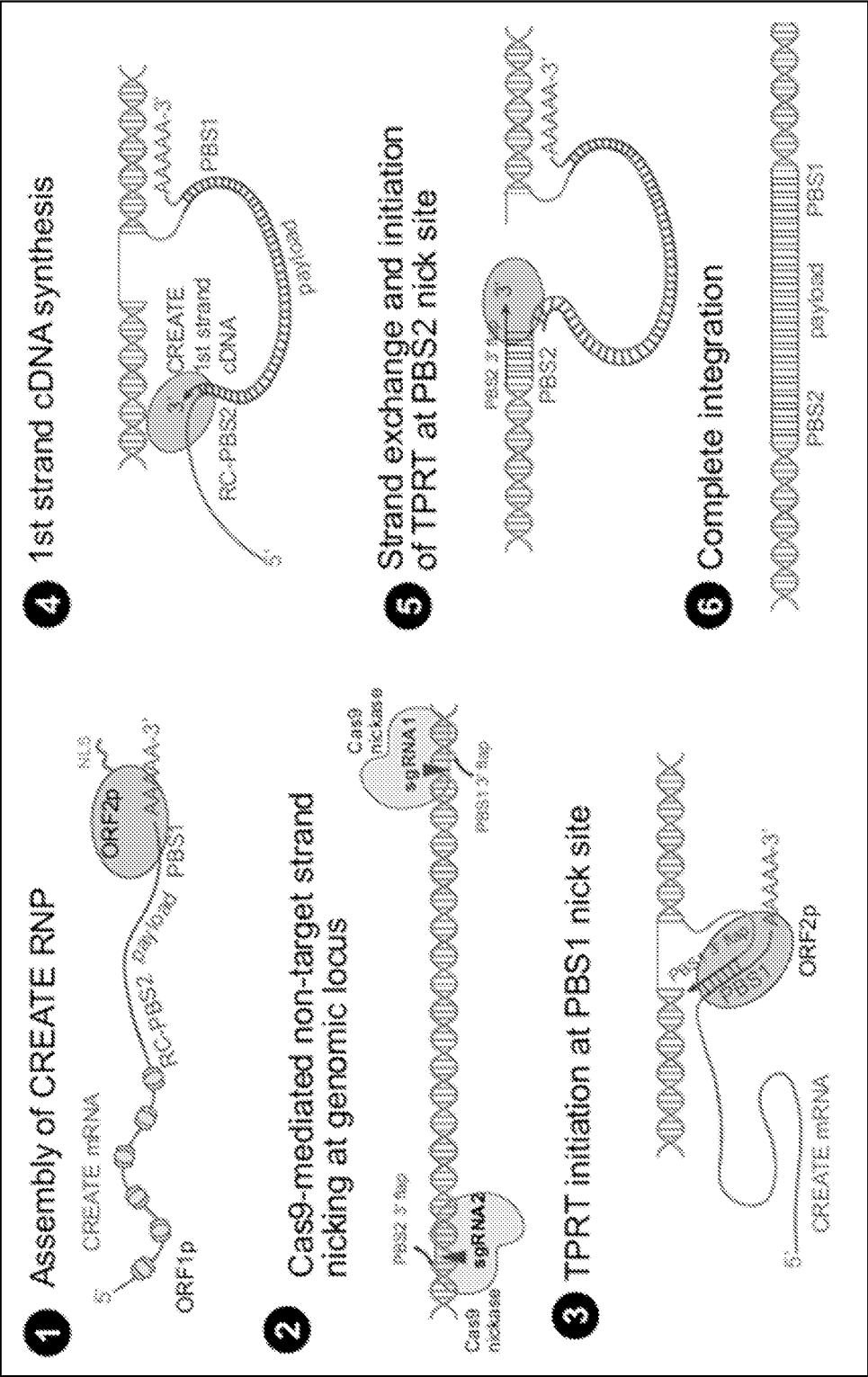


FIG. 16D

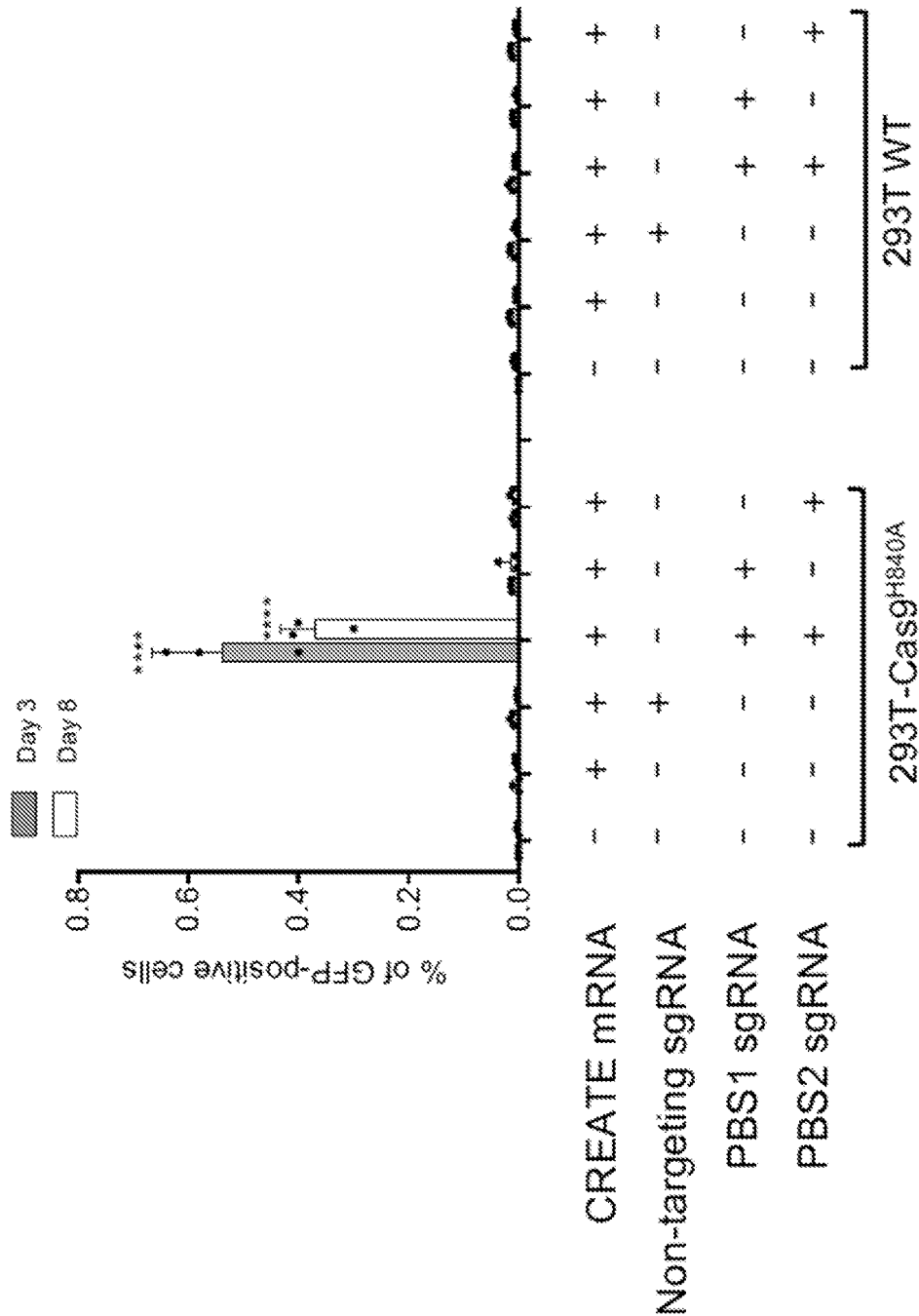


FIG. 16E

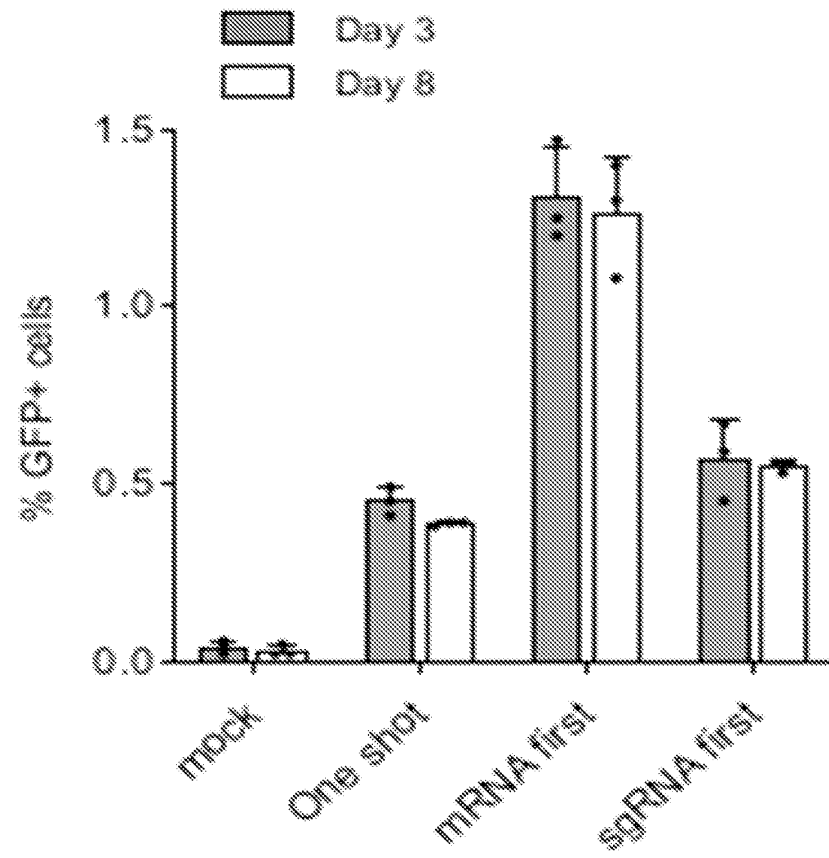


FIG. 16F

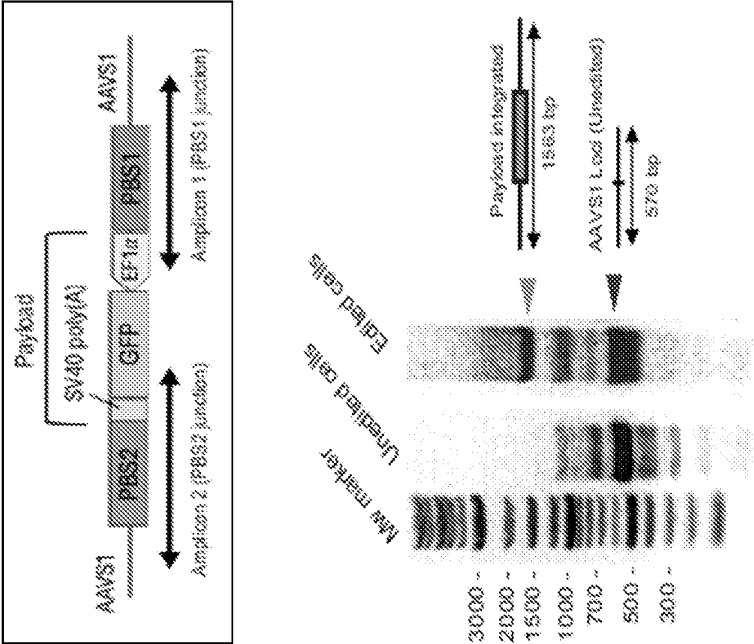


FIG. 17B

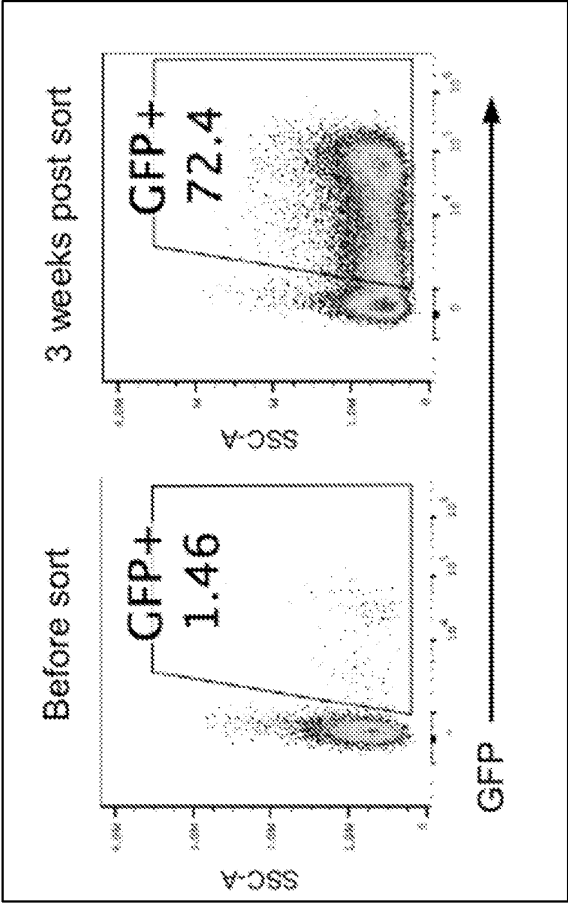


FIG. 17A

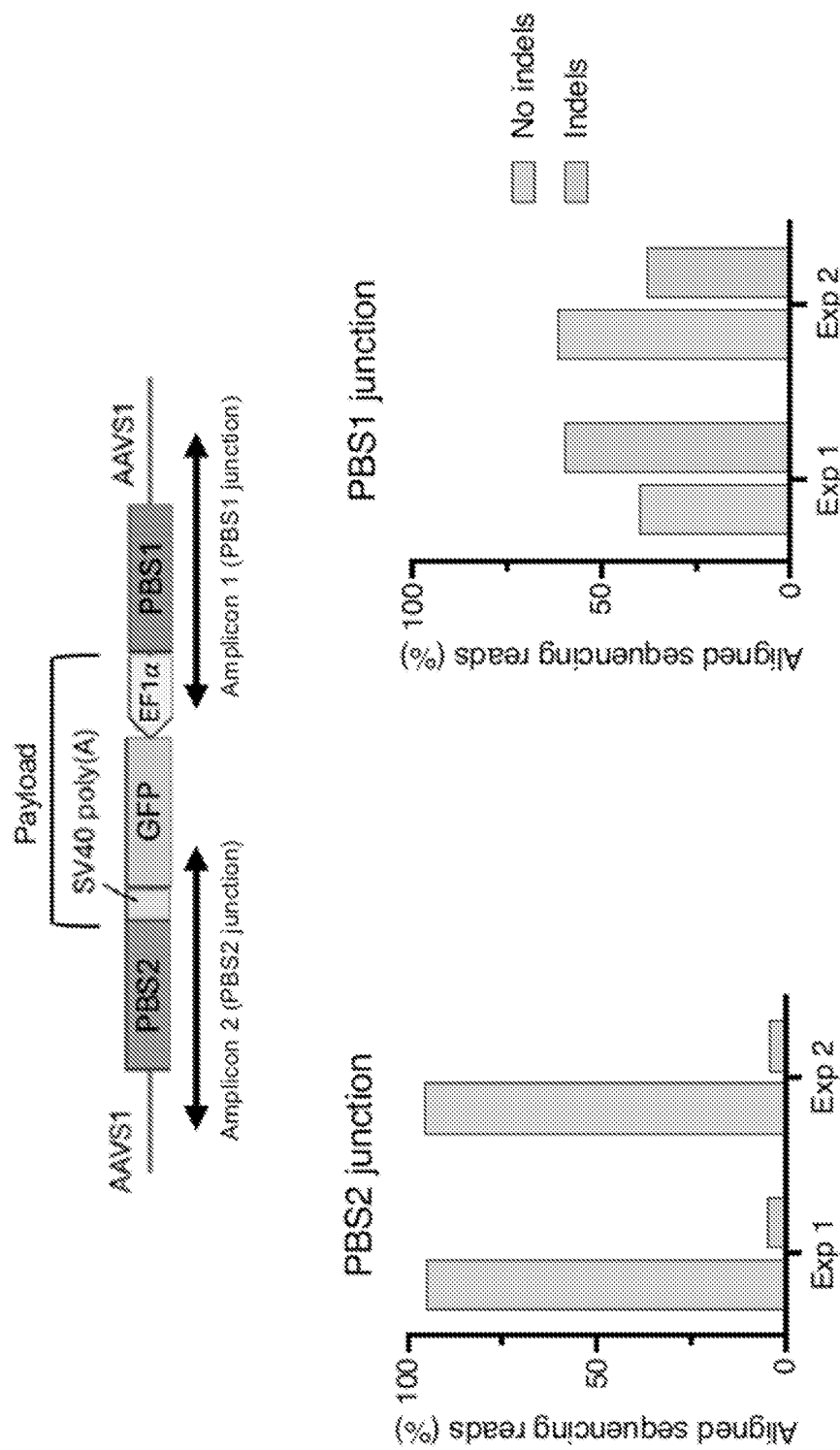


FIG. 17C

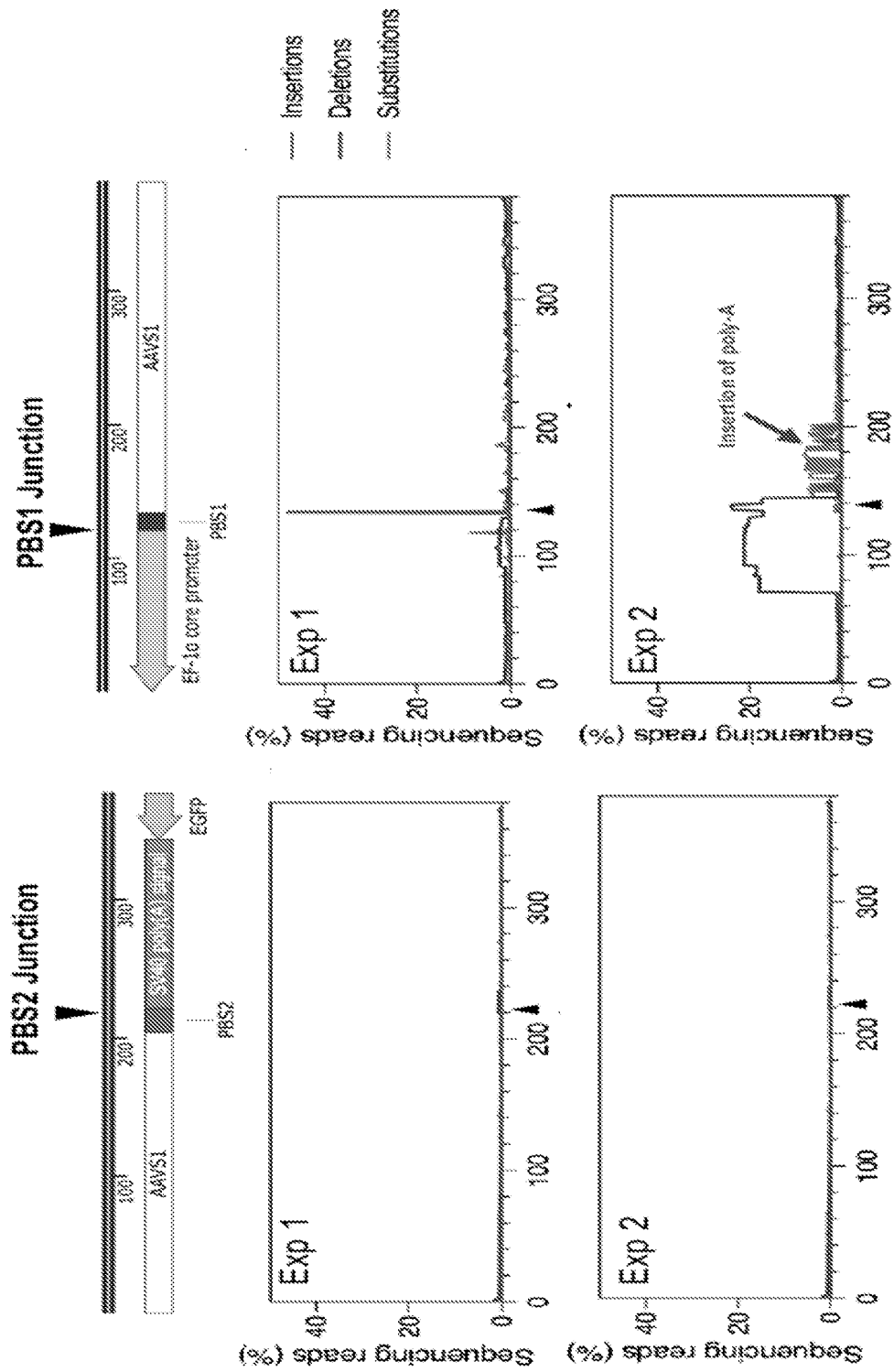


FIG. 17D

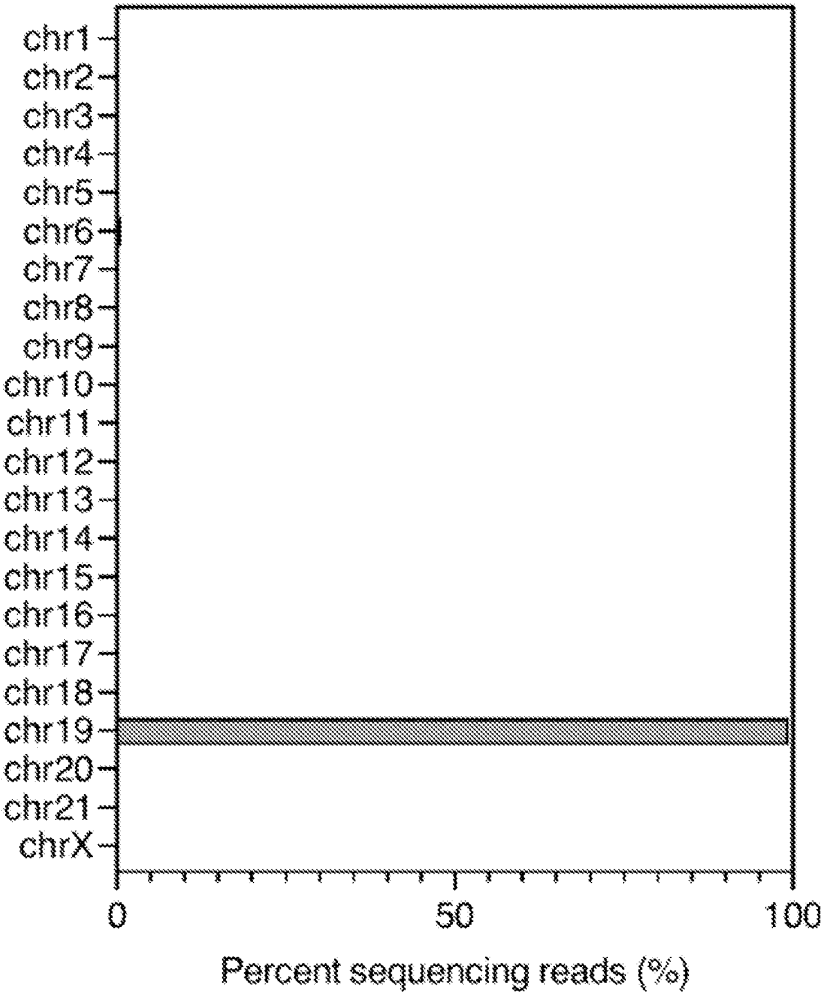


FIG. 17E

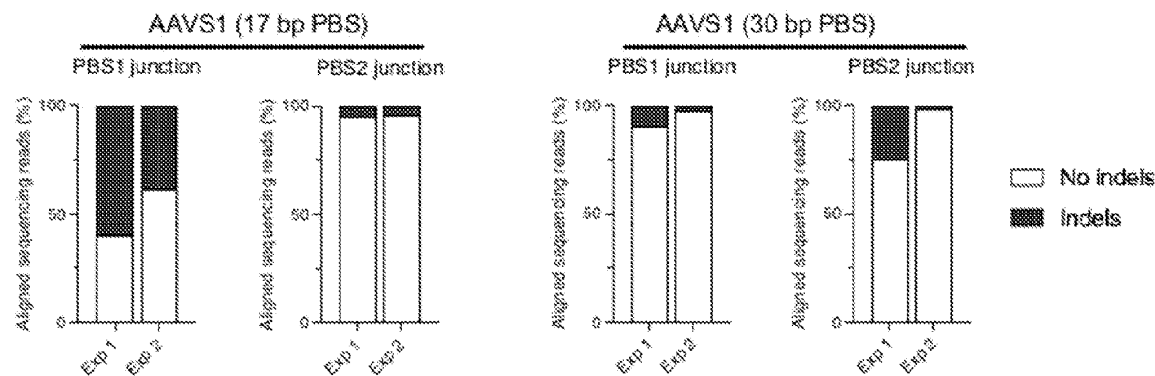


FIG. 17F

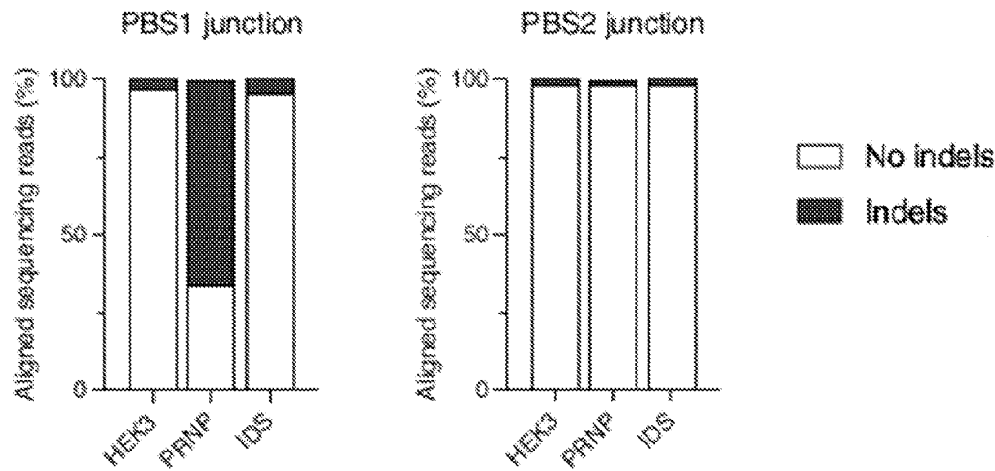


FIG. 17G

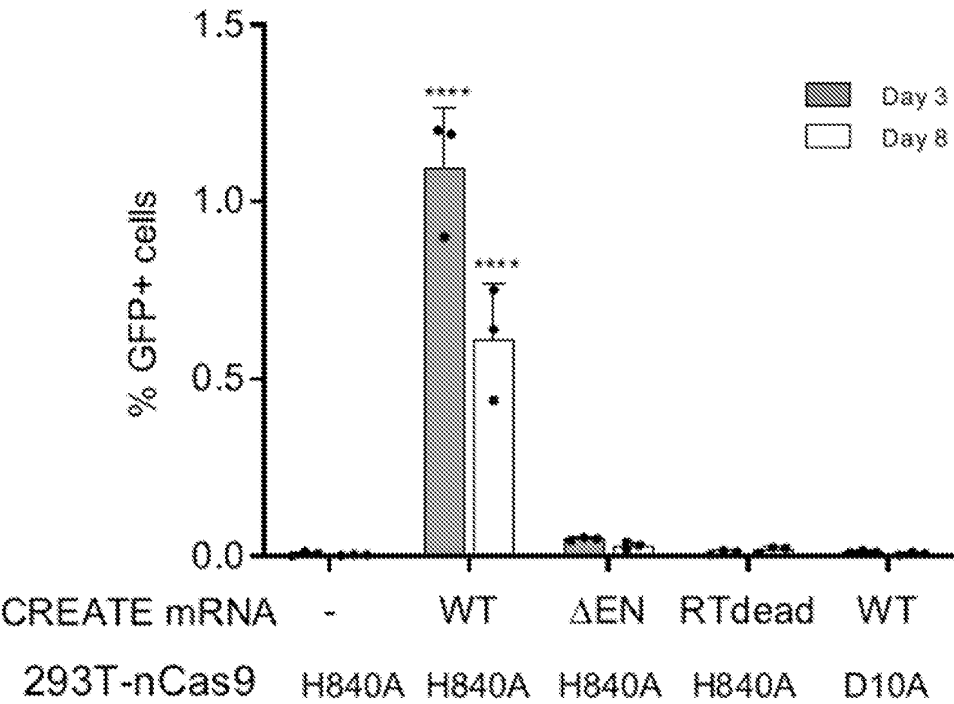


FIG. 18A

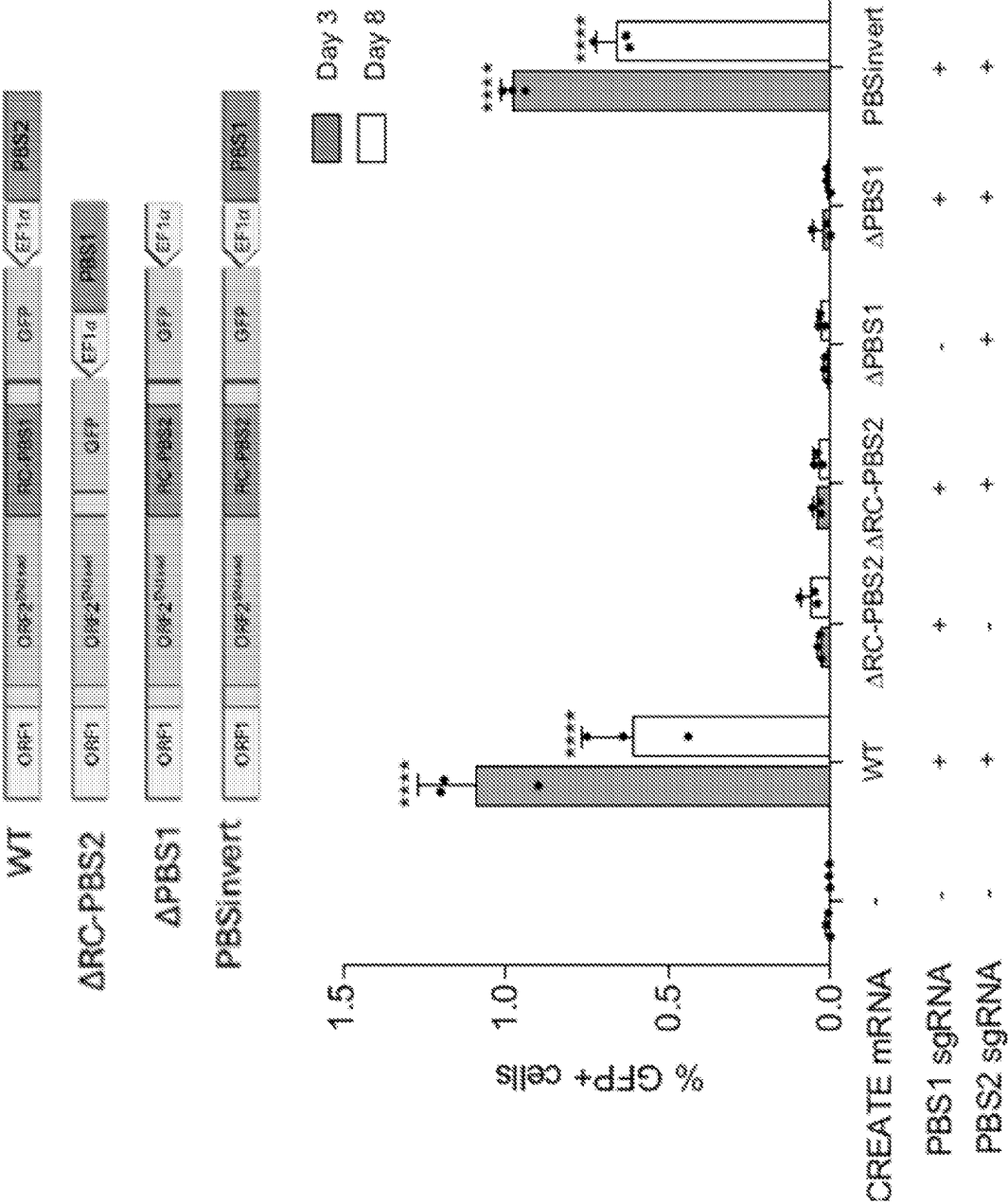


FIG. 18B

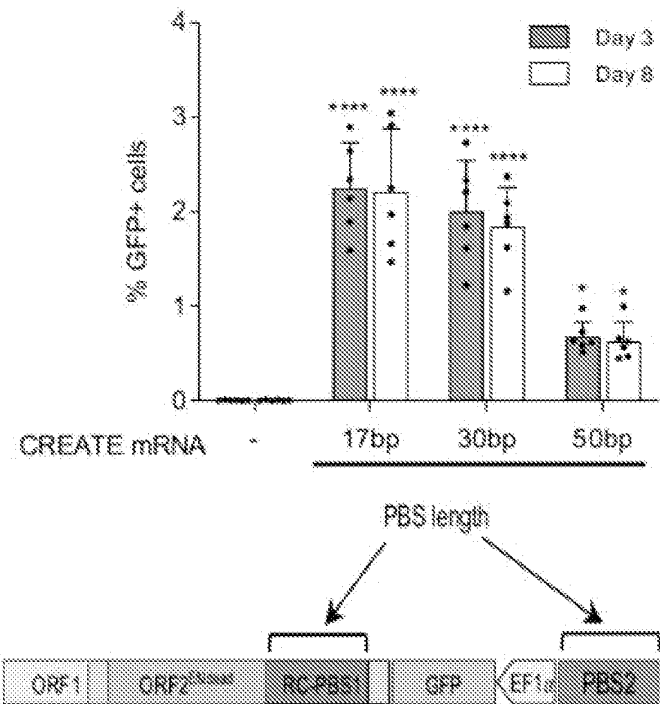


FIG. 18C

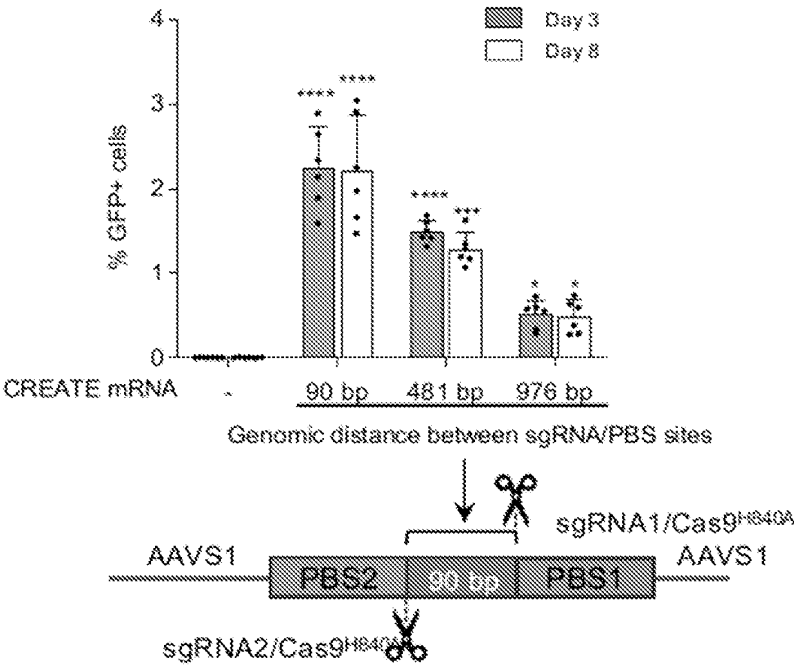


FIG. 18D

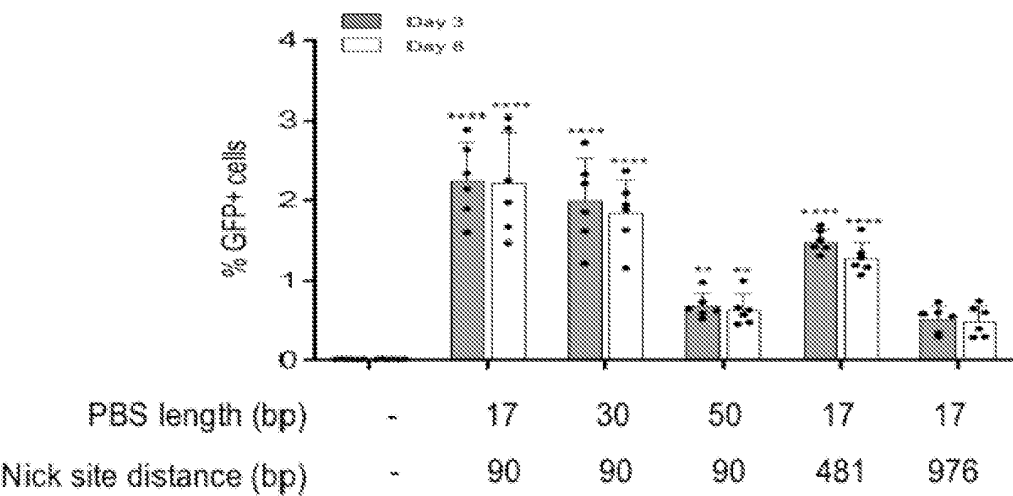


FIG. 18E

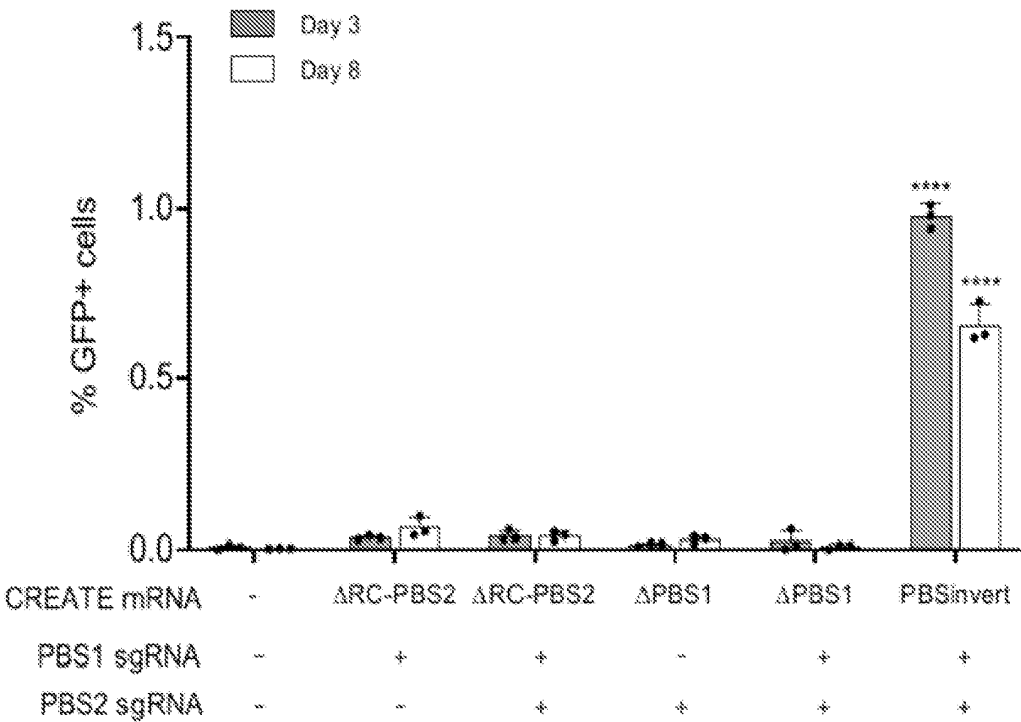


FIG. 18F

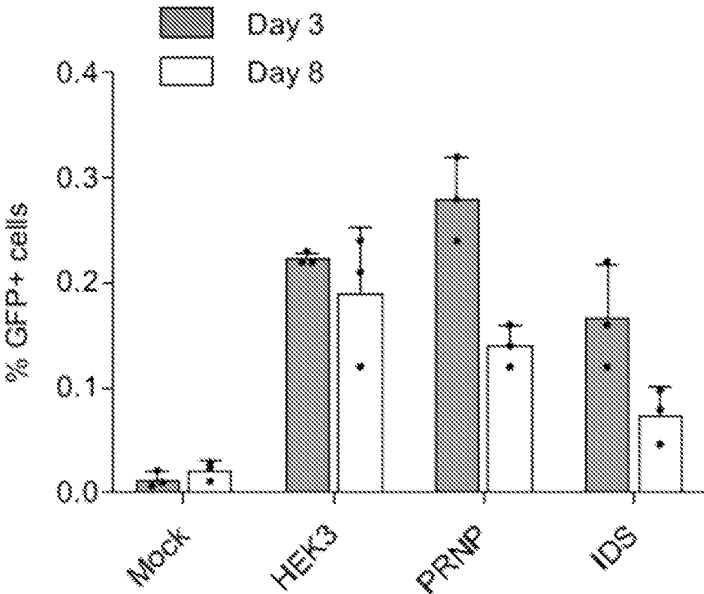


FIG. 19A

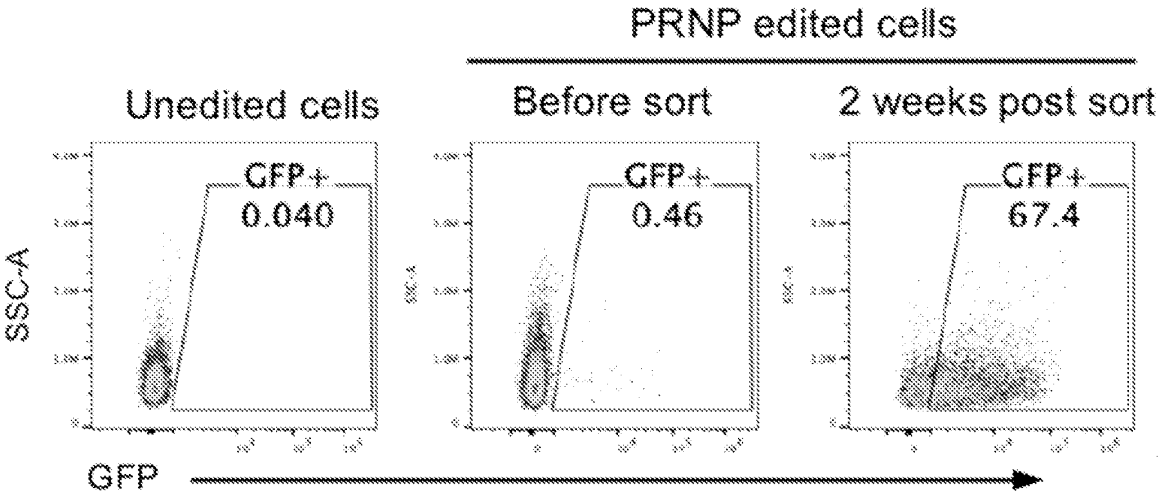


FIG. 19B

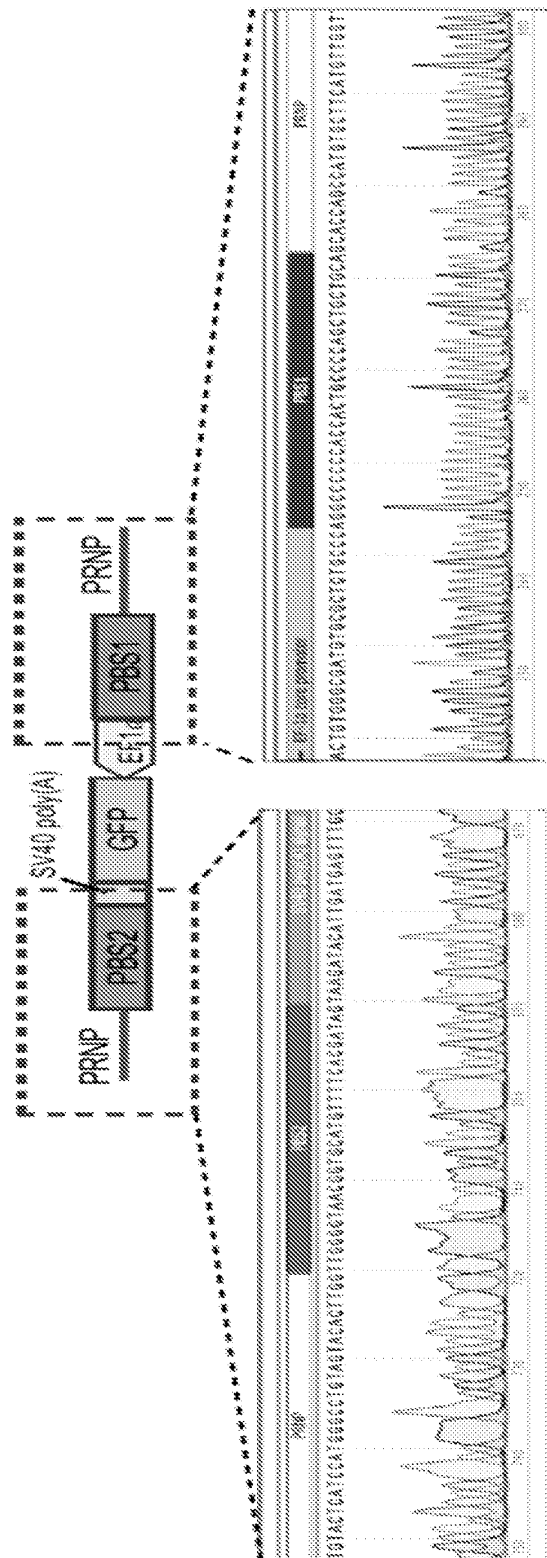


FIG. 19C

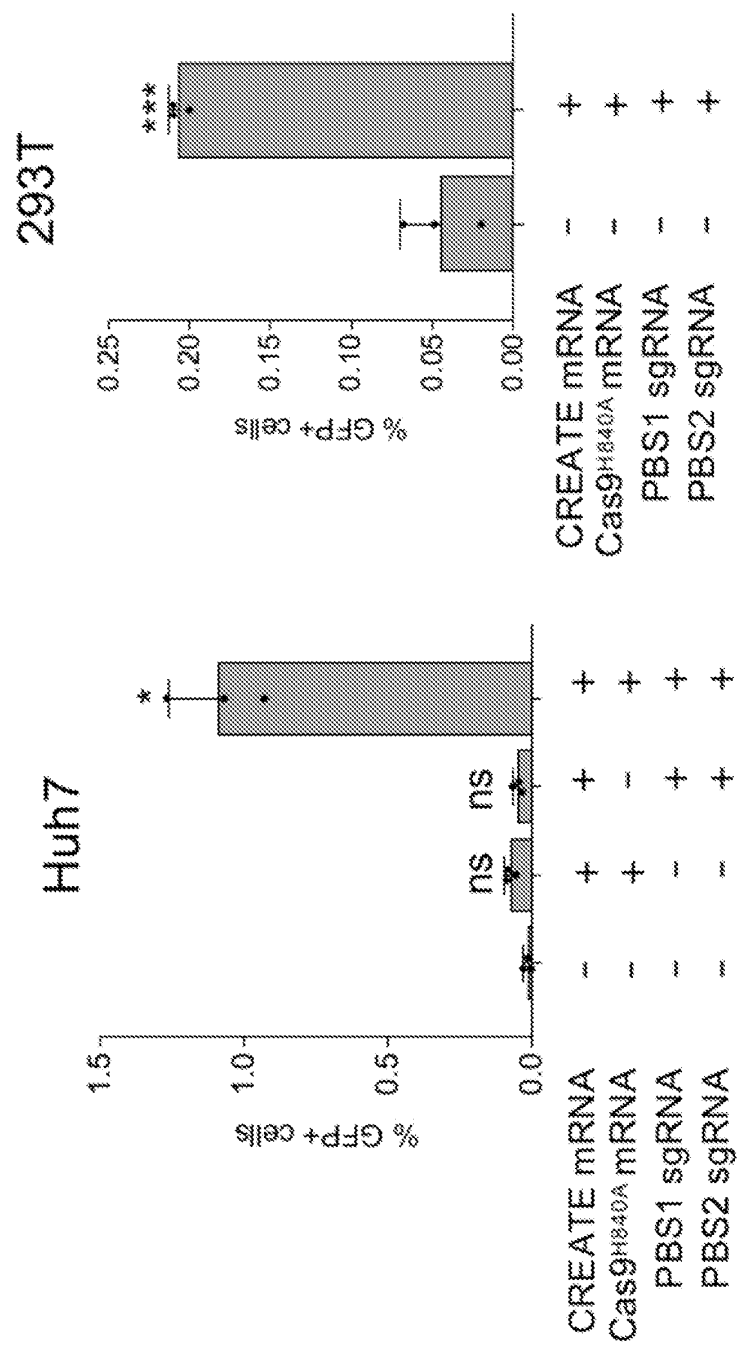


FIG. 19D

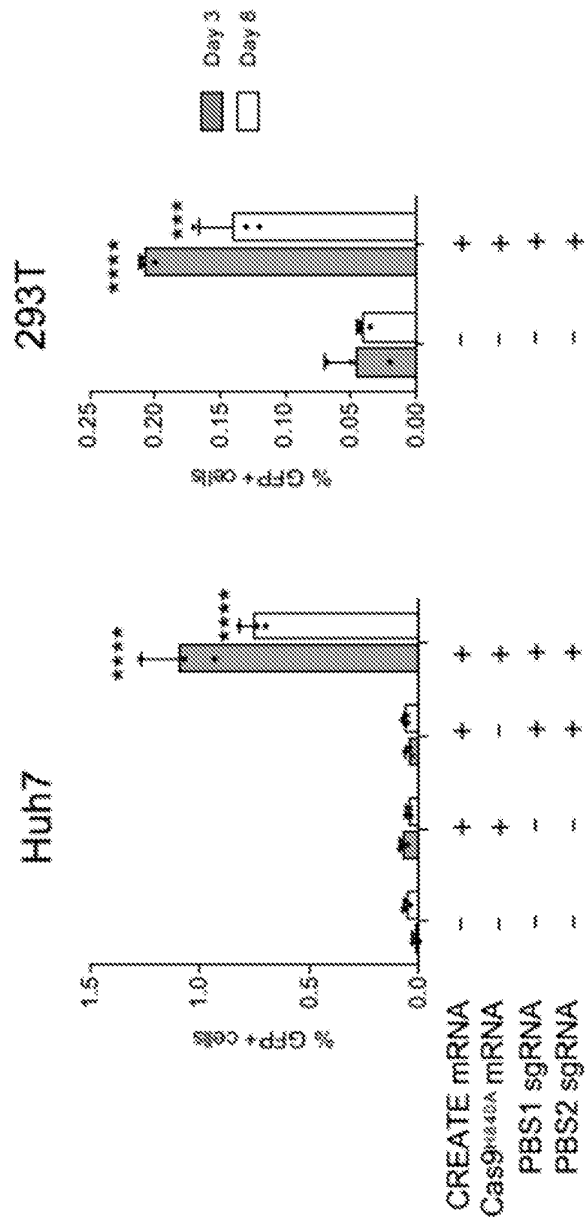
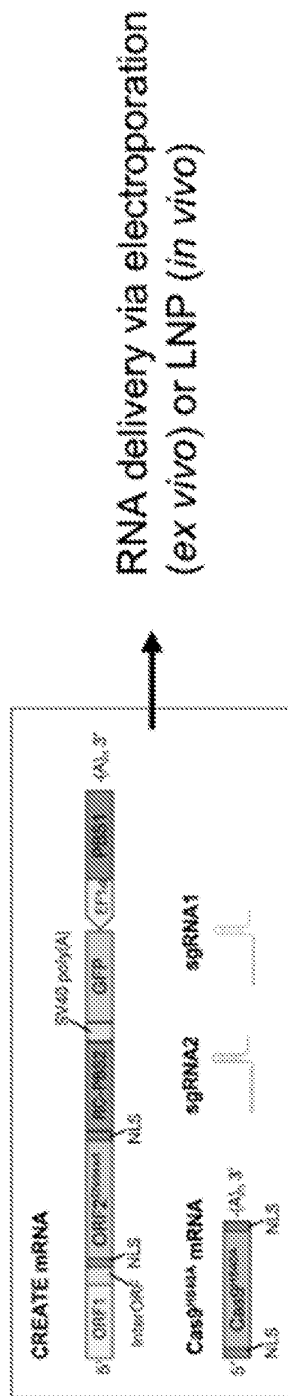


FIG. 19E

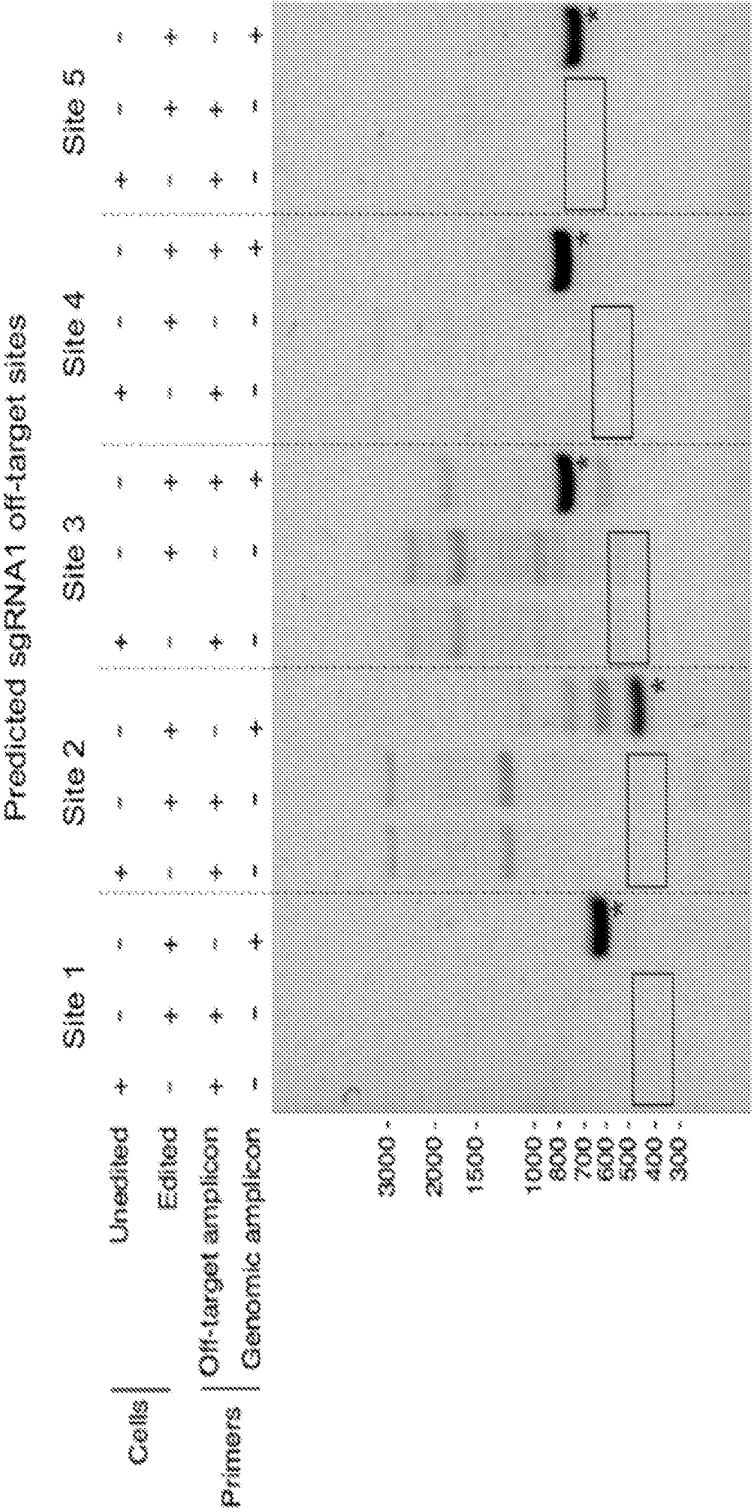


FIG. 20A

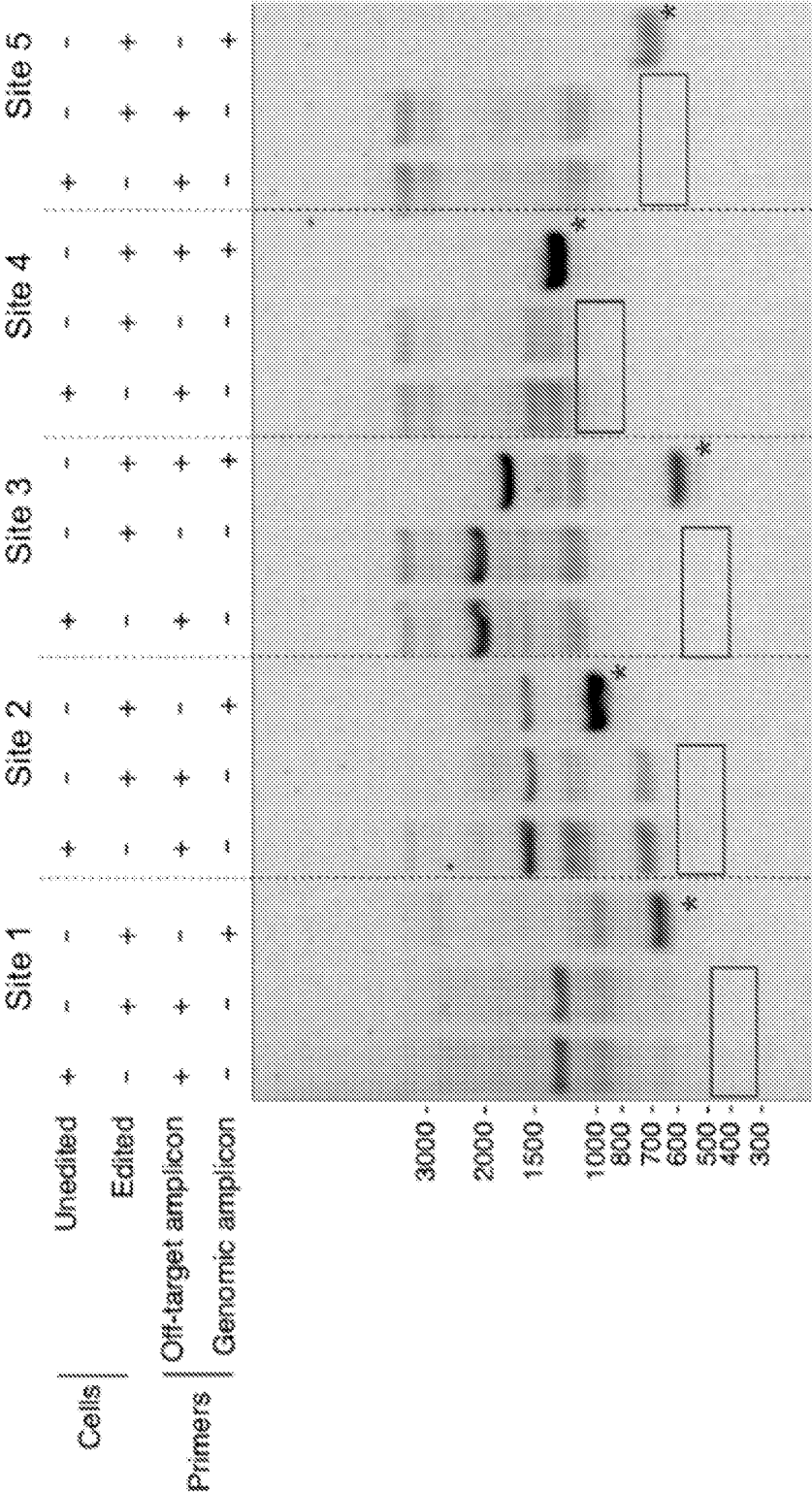


FIG. 20B

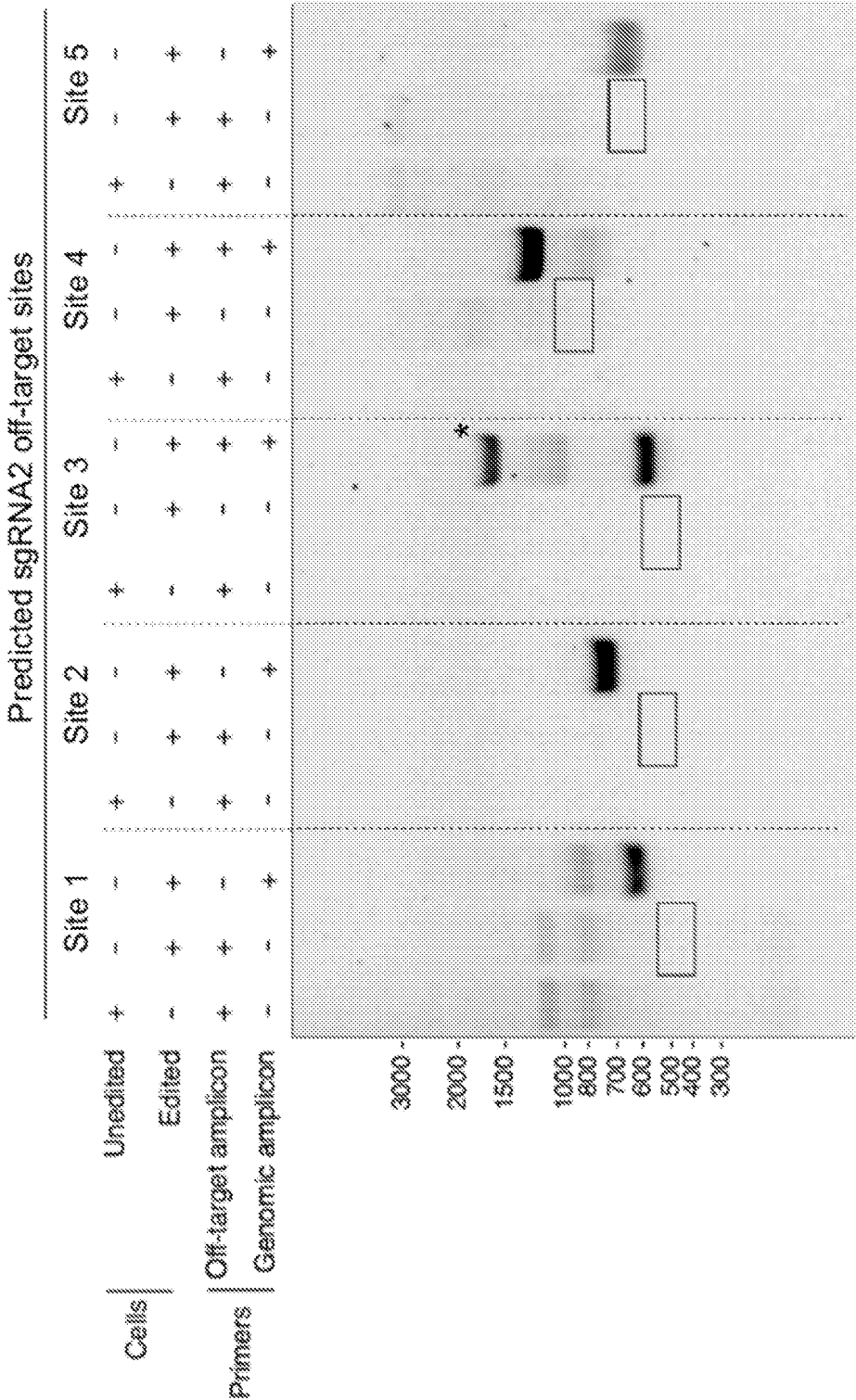


FIG. 20C

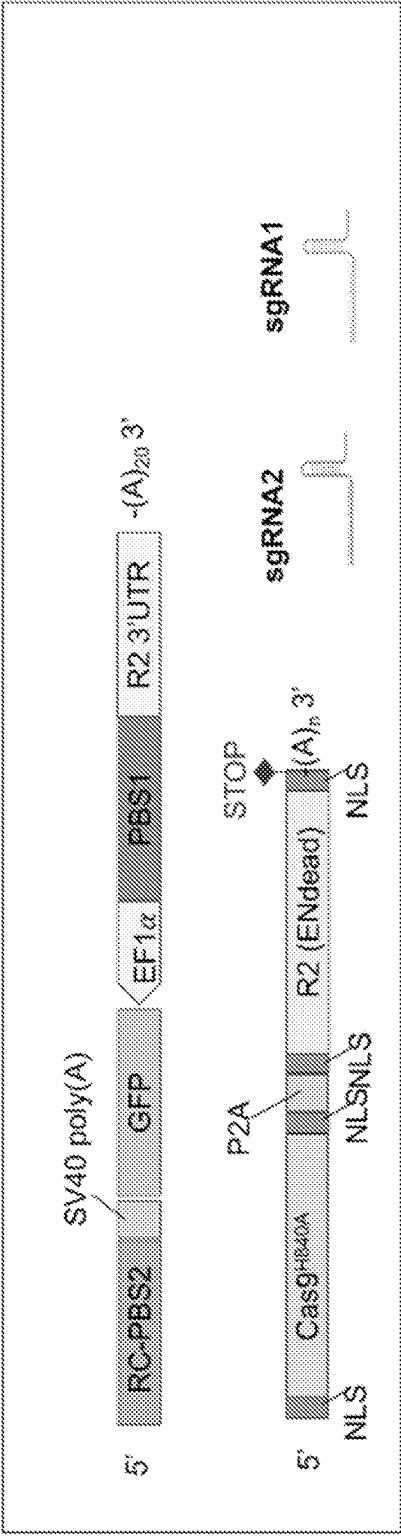
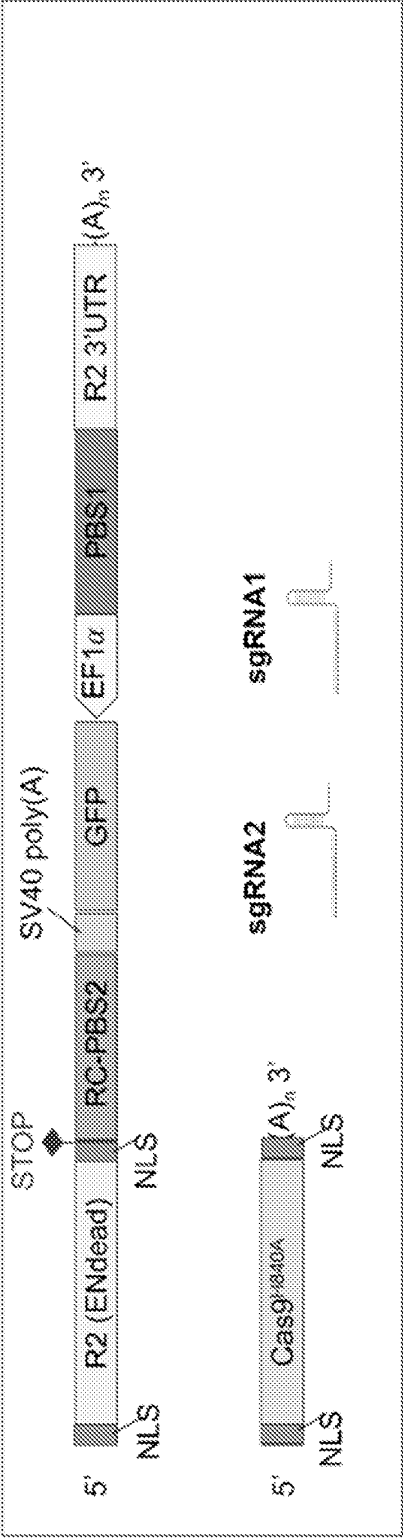


FIG. 21

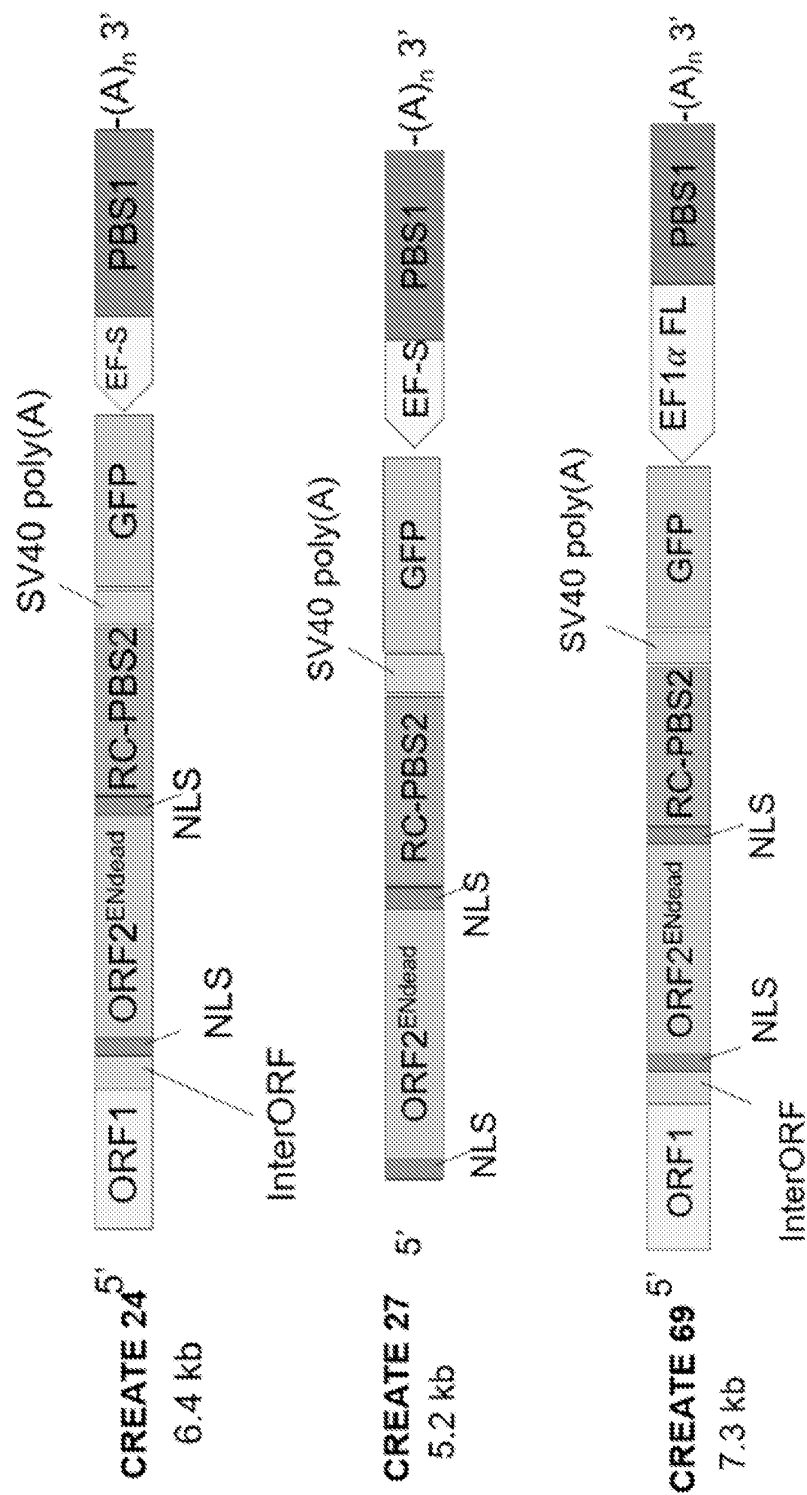
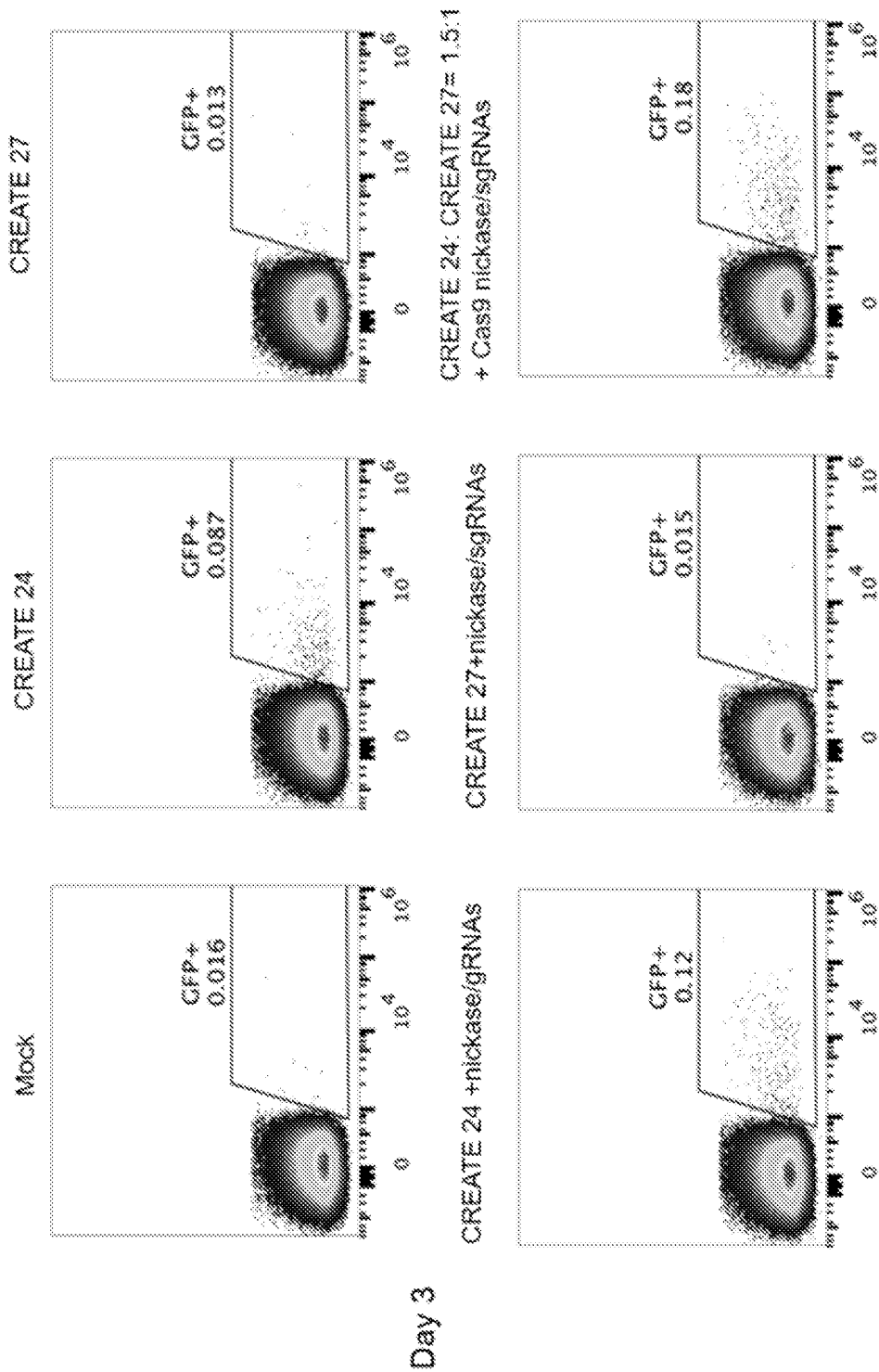


FIG. 22



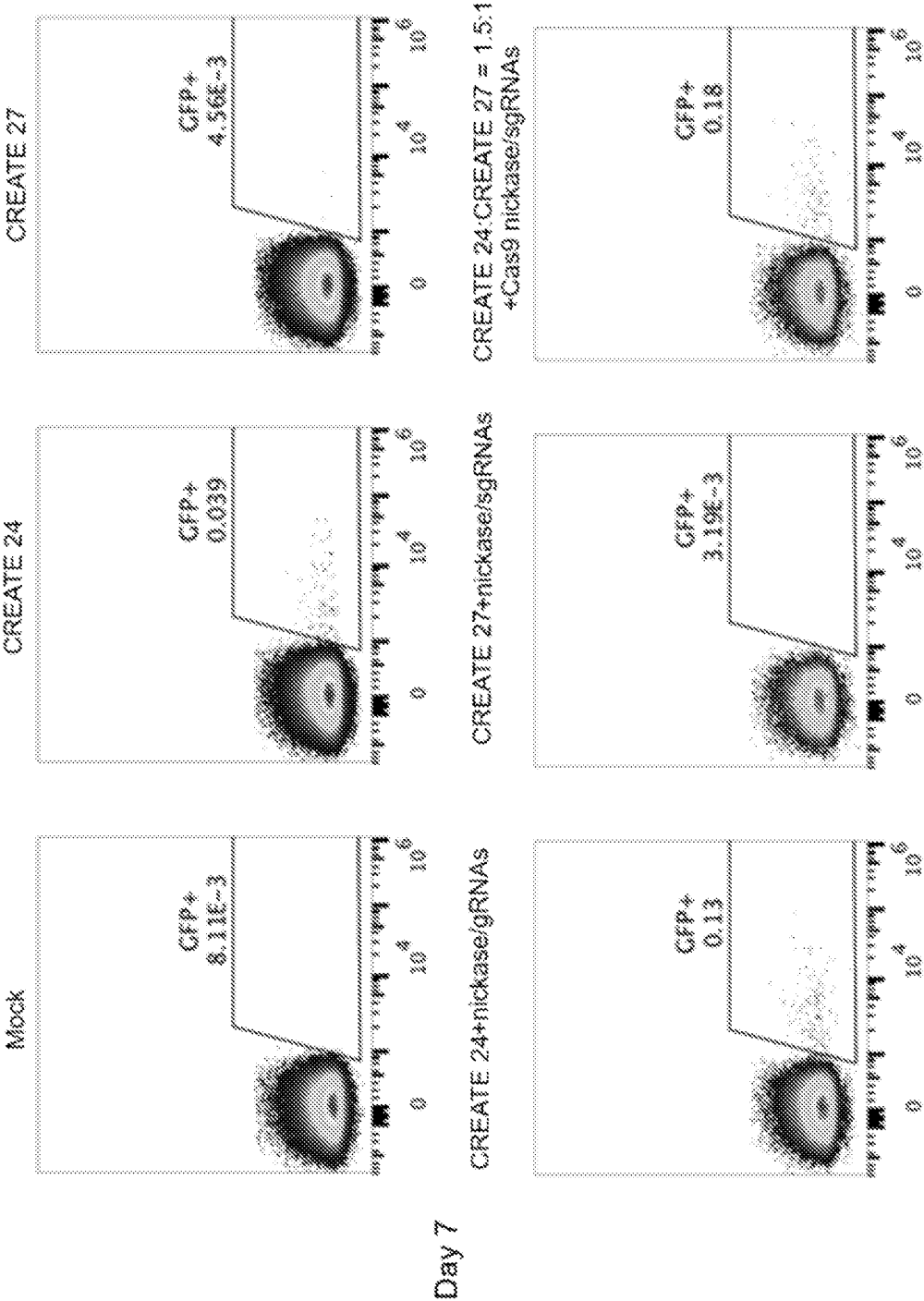


FIG. 23B

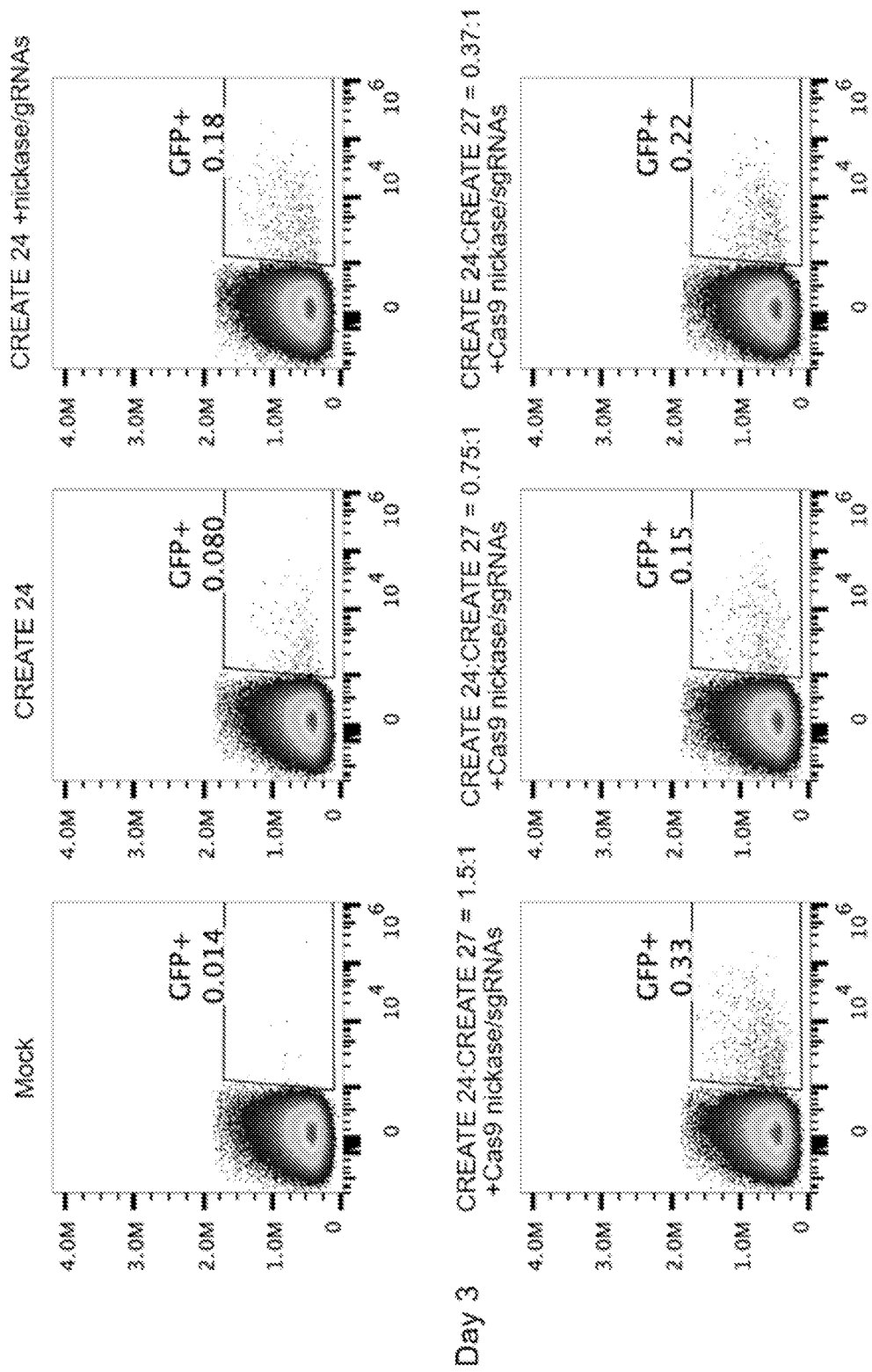


FIG. 24A

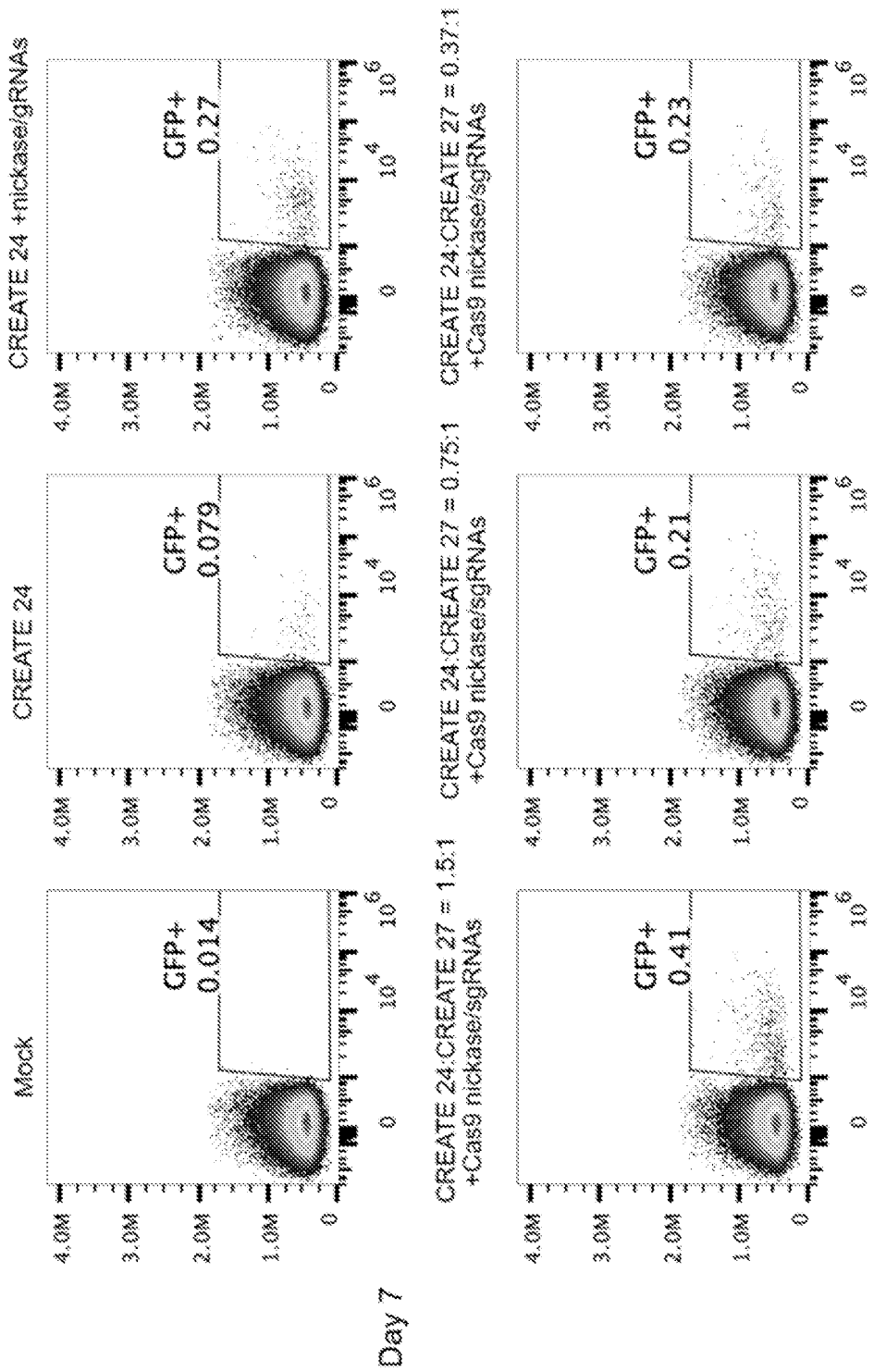


FIG. 24B

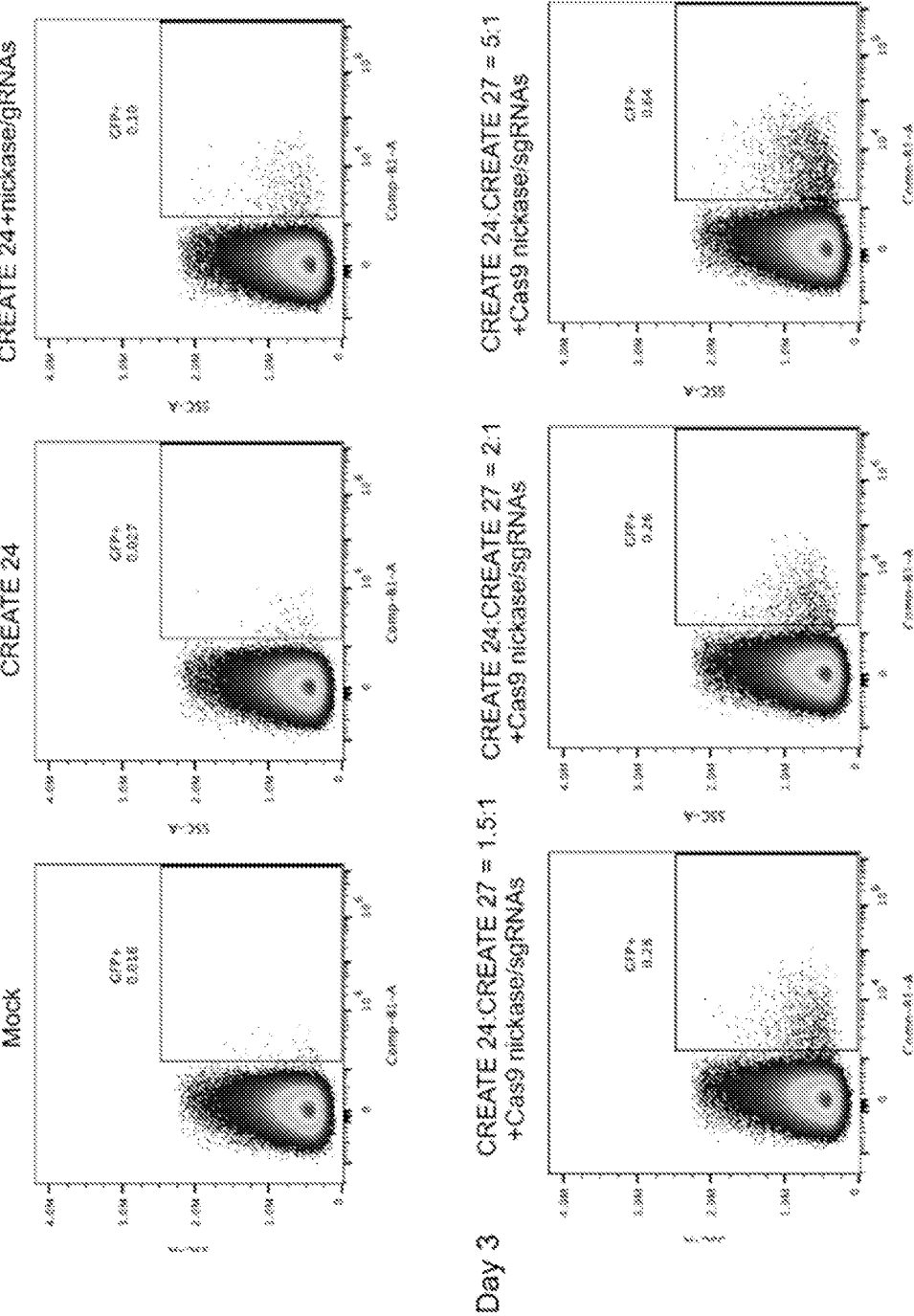


FIG. 25A

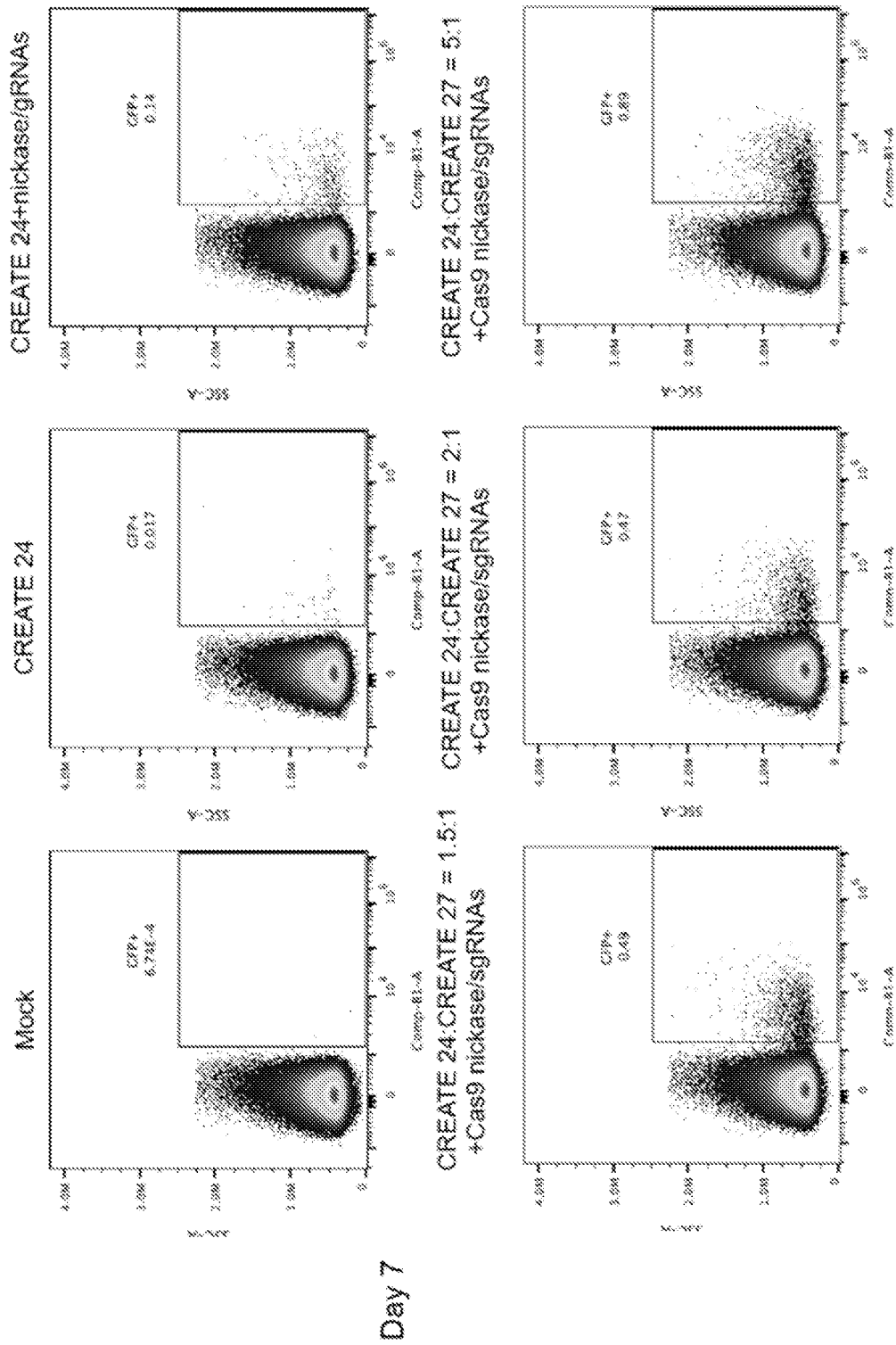


FIG. 25B

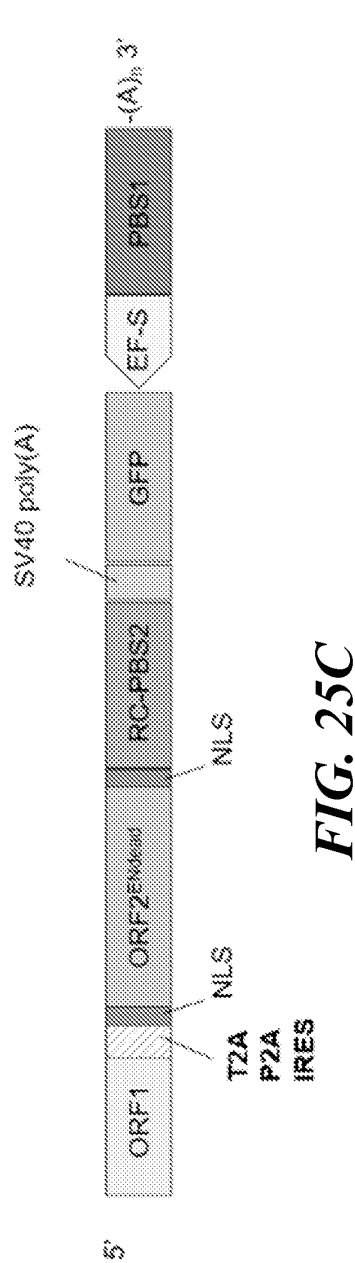


FIG. 25C

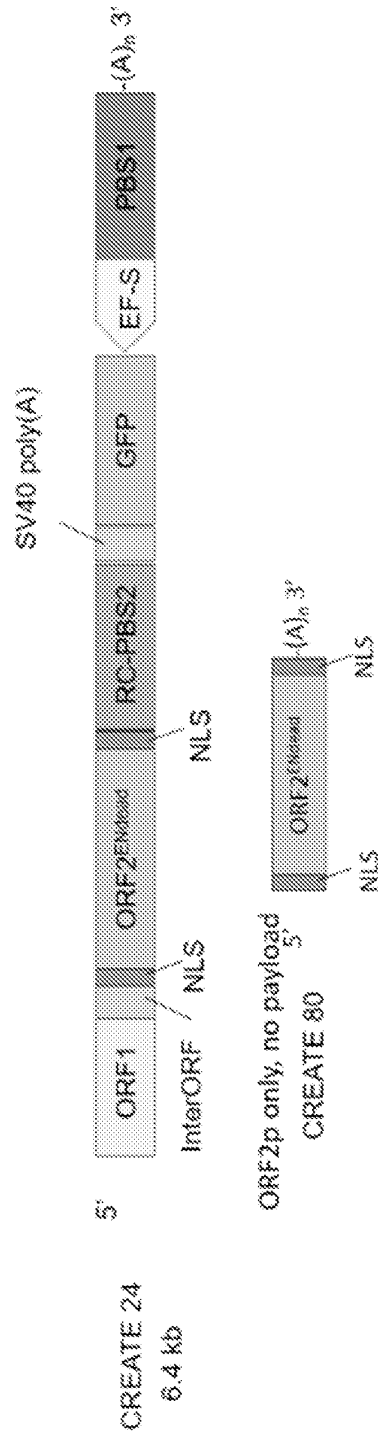


FIG. 25D

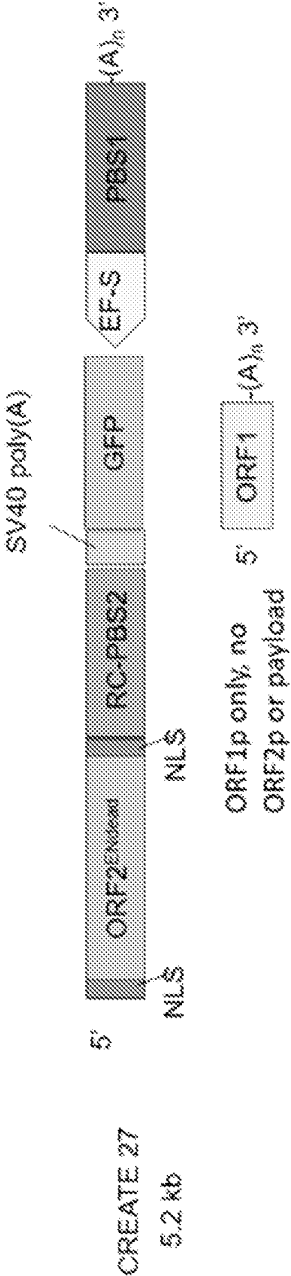


FIG. 25E

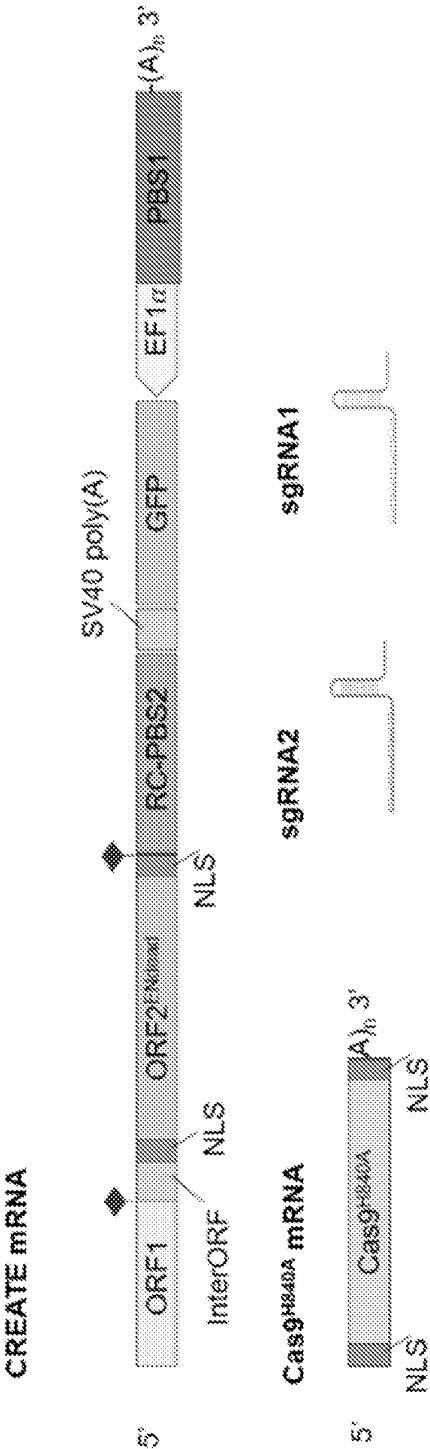


FIG. 26A

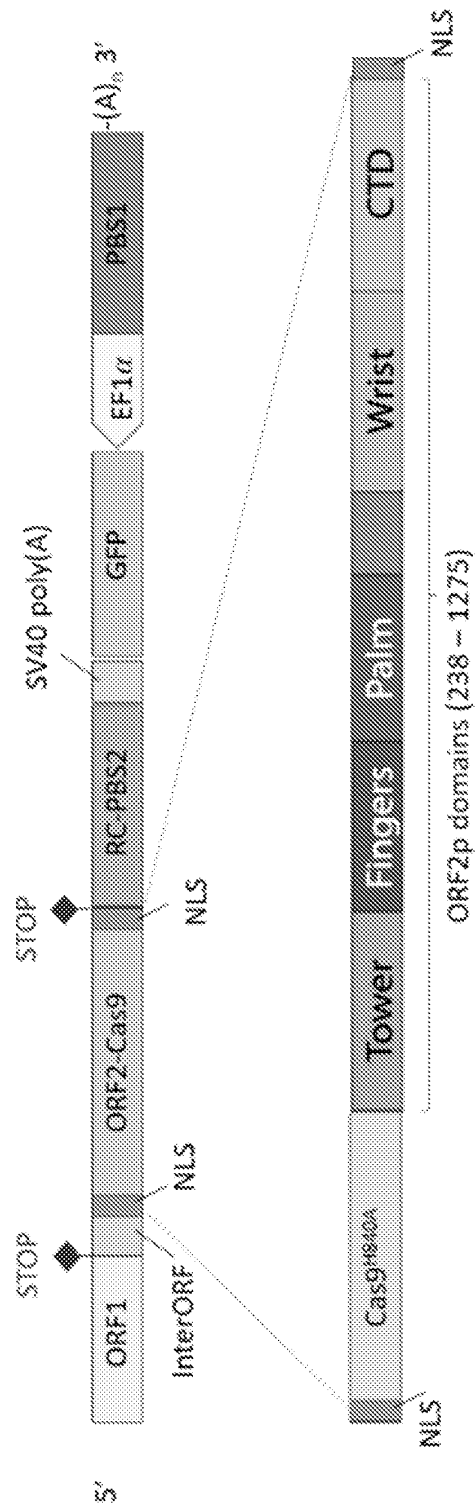


FIG. 26B

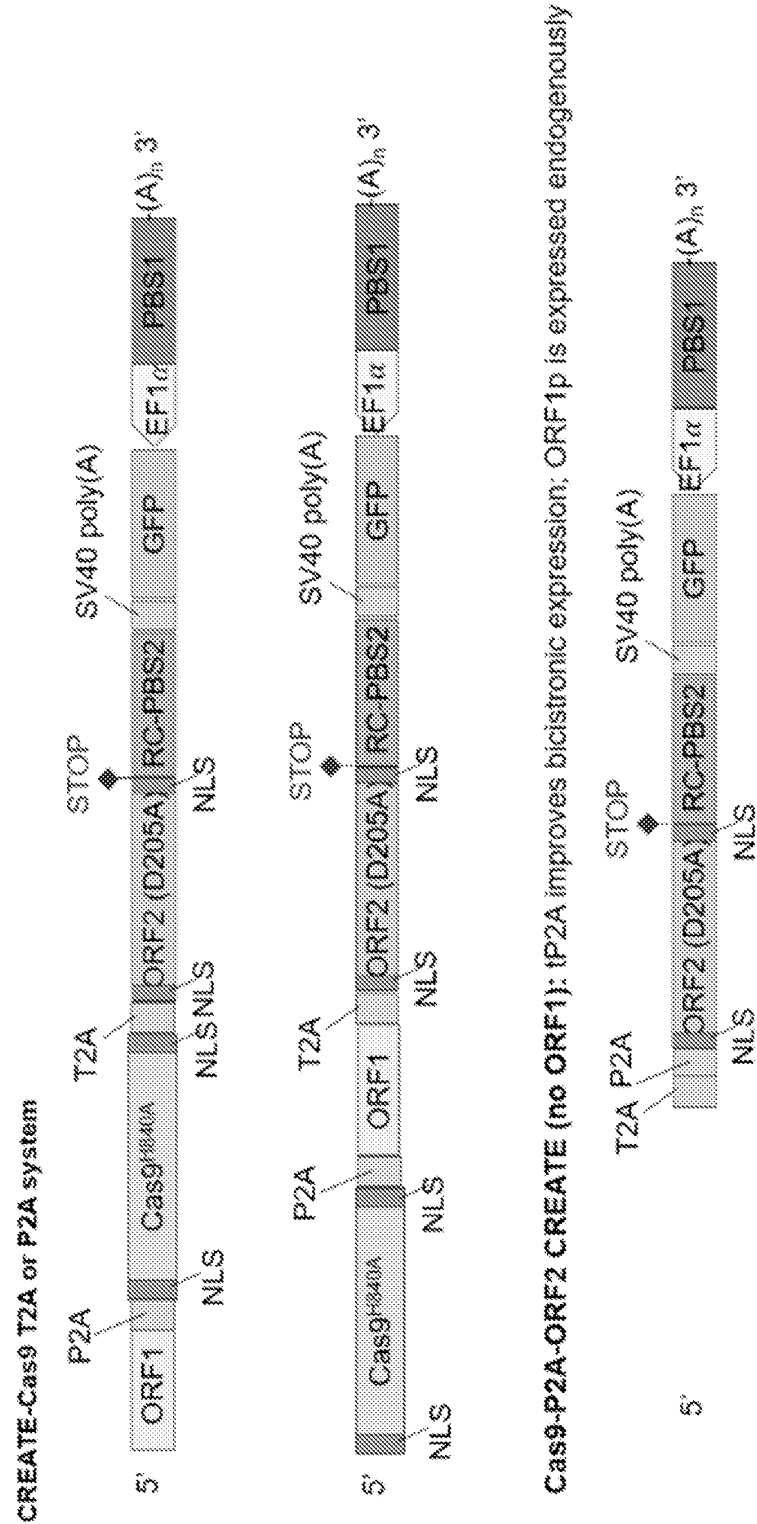


FIG. 27

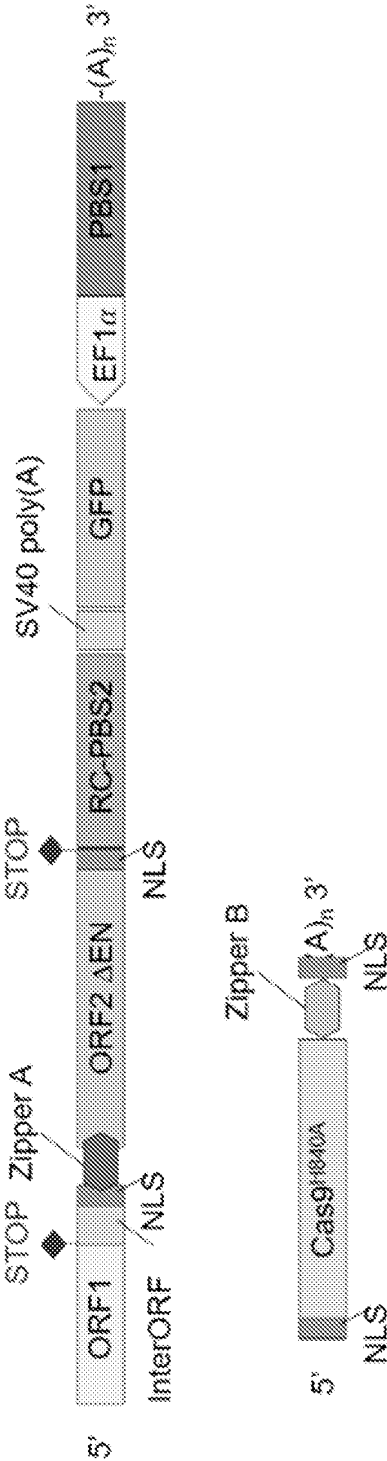


FIG. 28

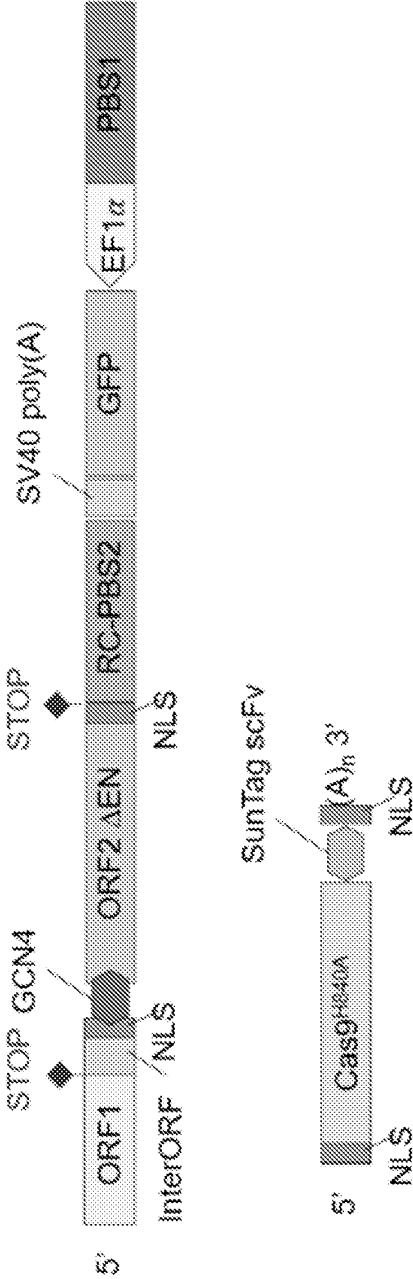


FIG. 29

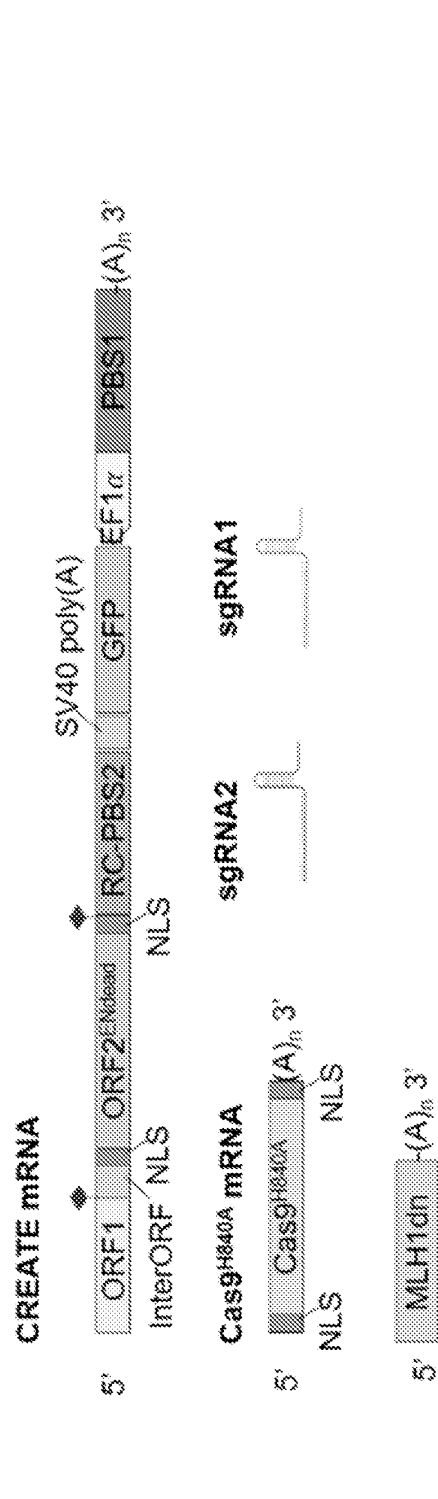
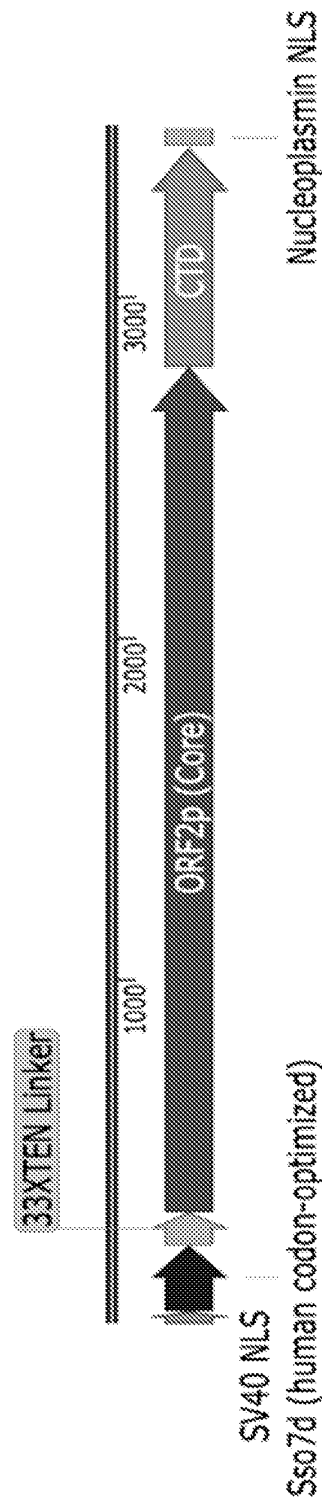
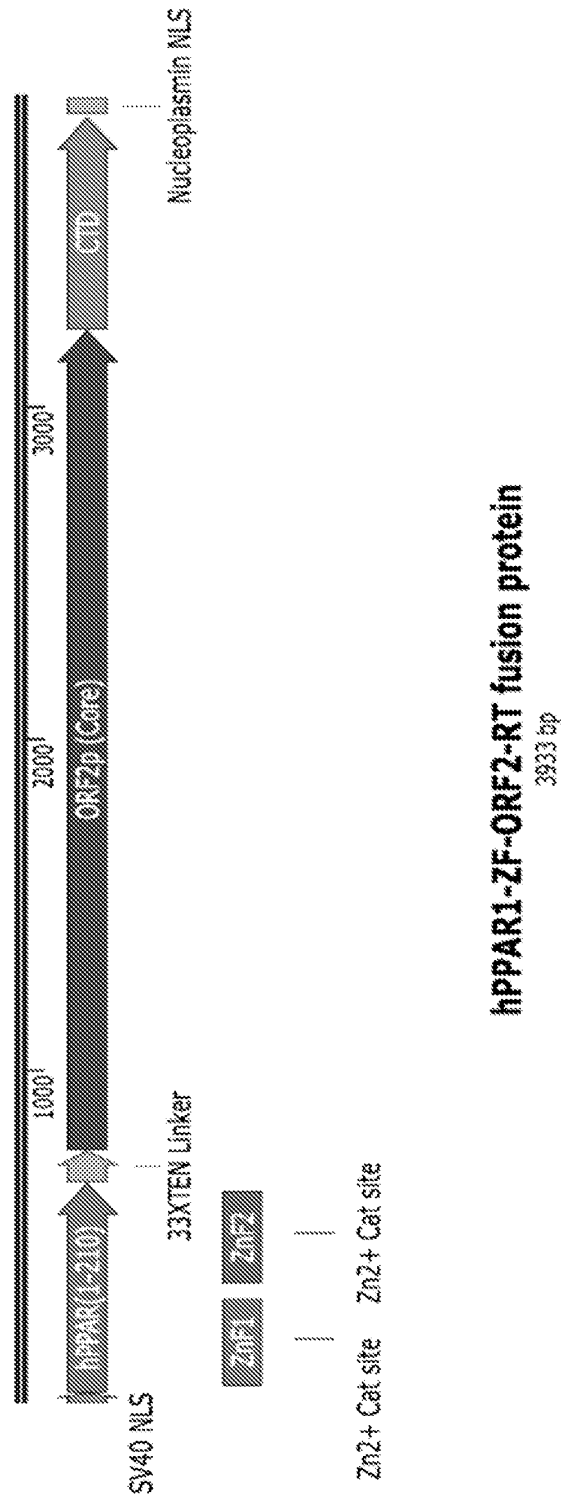


FIG. 30



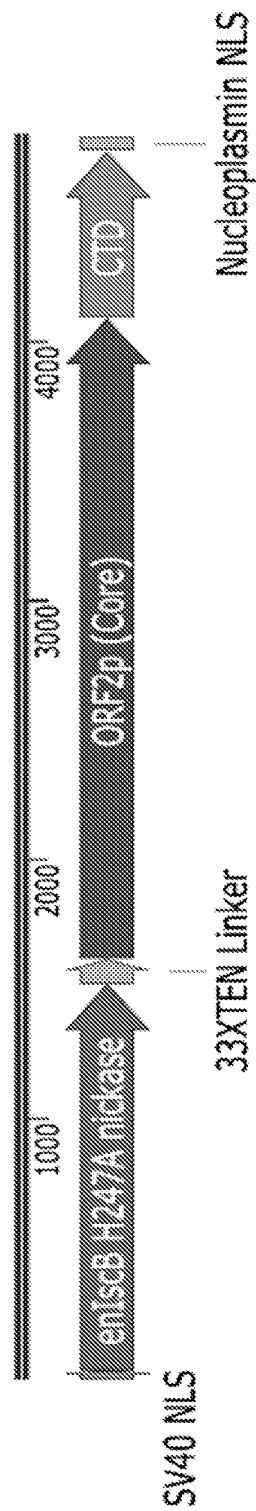
Sso7d-ORF2-RT fusion protein
3495 bp

FIG. 31



hPPAR1-ZF-ORF2-RT fusion protein

FIG. 32



enIscB-ORF2-RT fusion protein
4791 bp 1,600 a.a.

FIG. 33

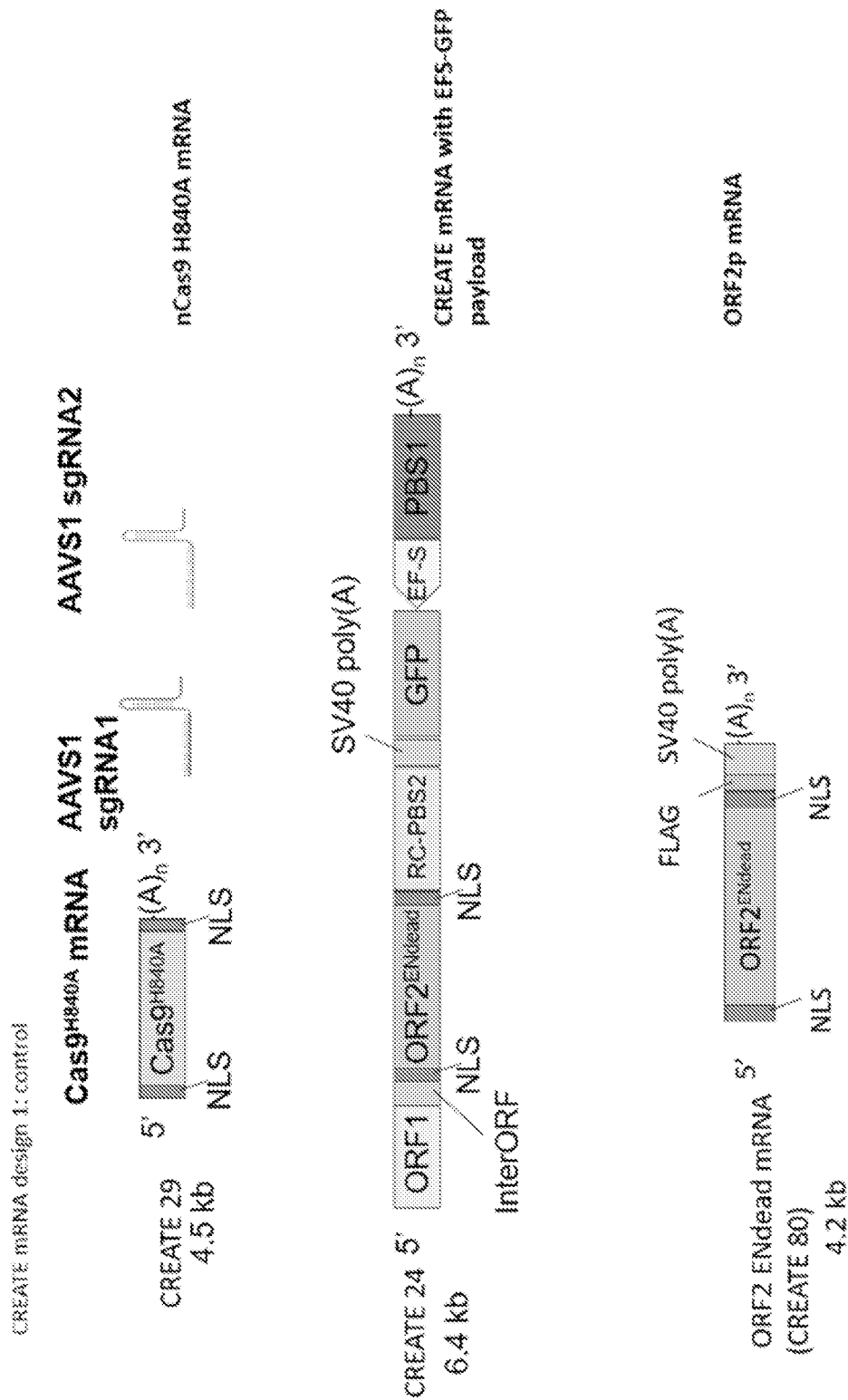


FIG. 34

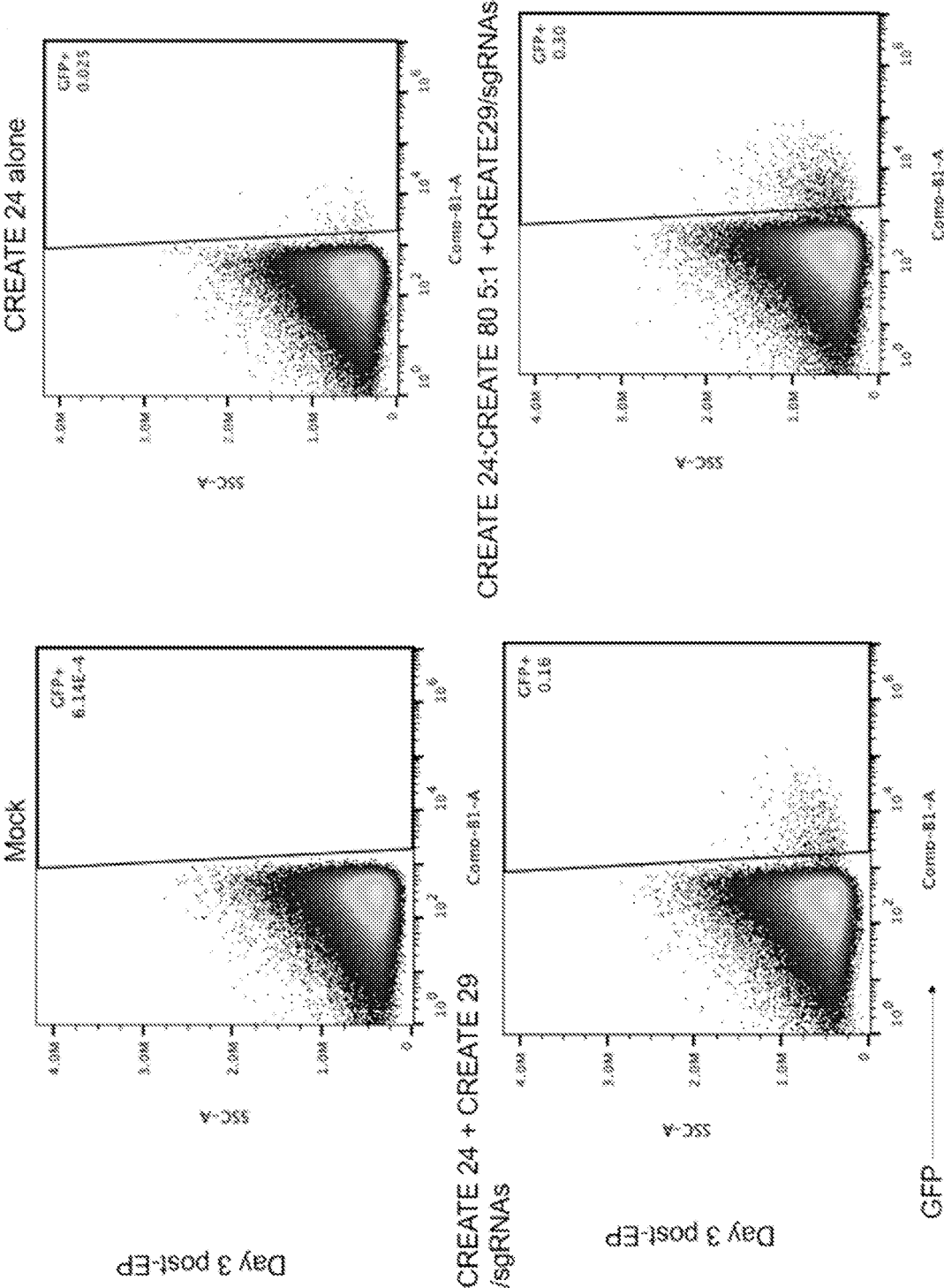


FIG. 35A

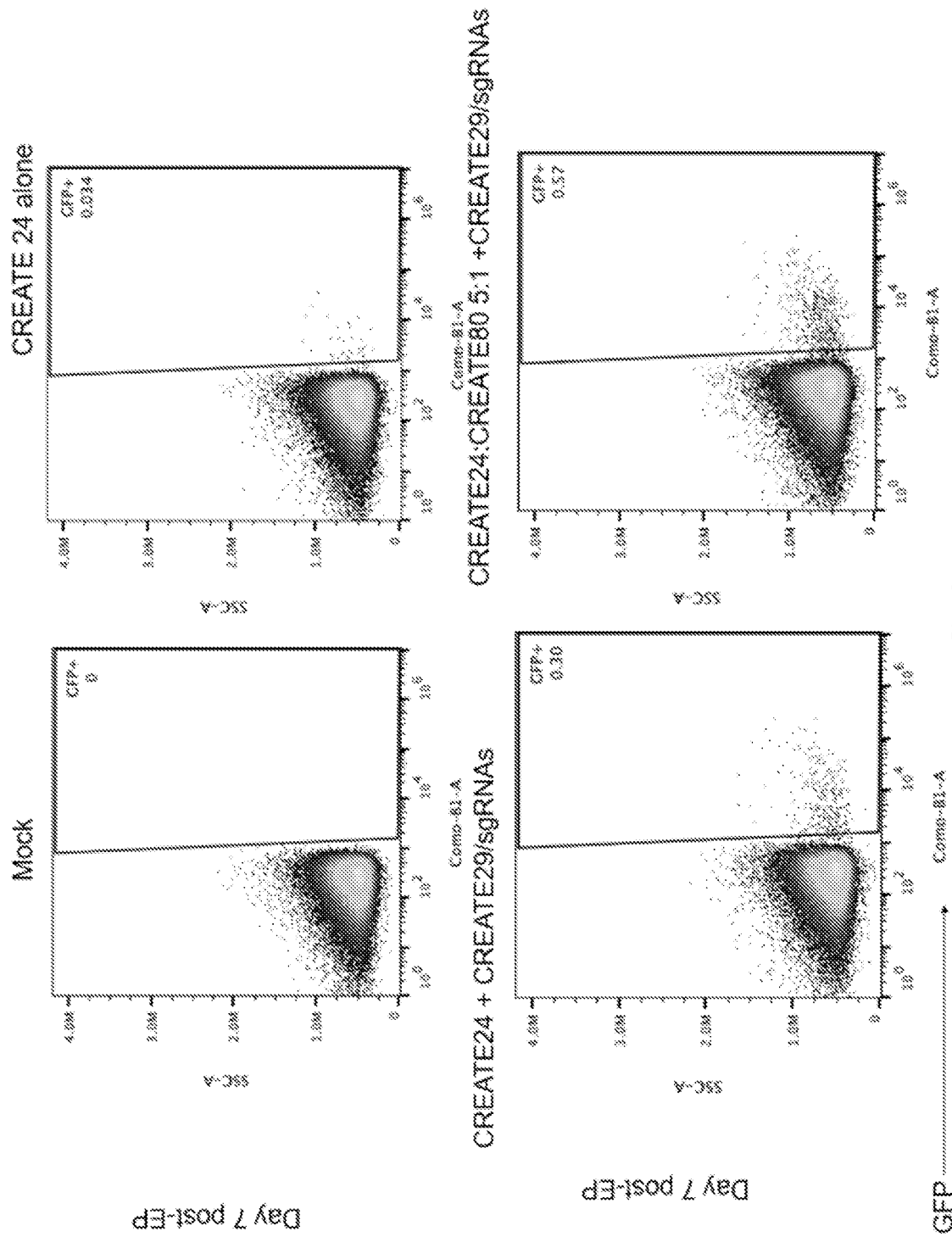


FIG. 35B

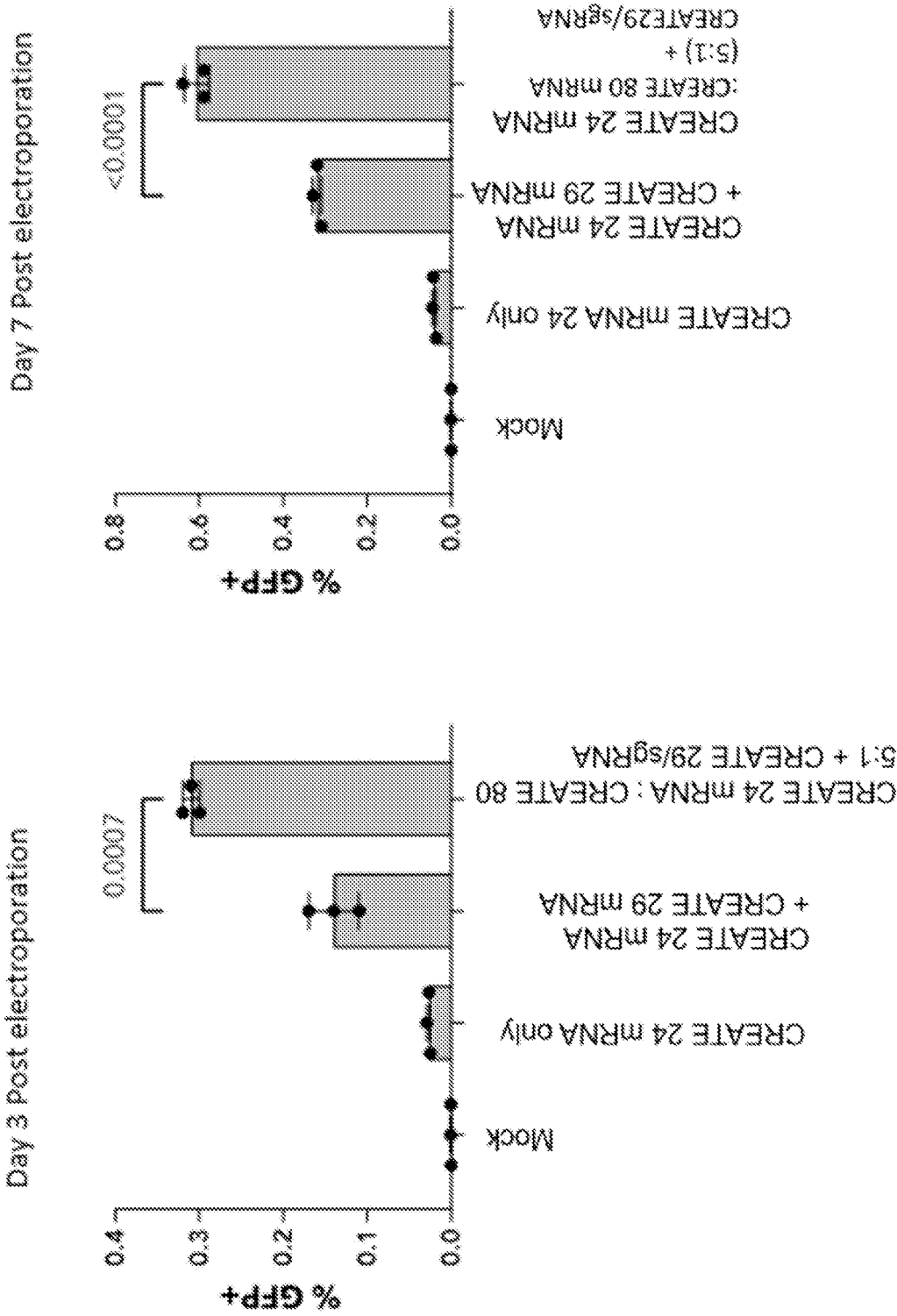


FIG. 36

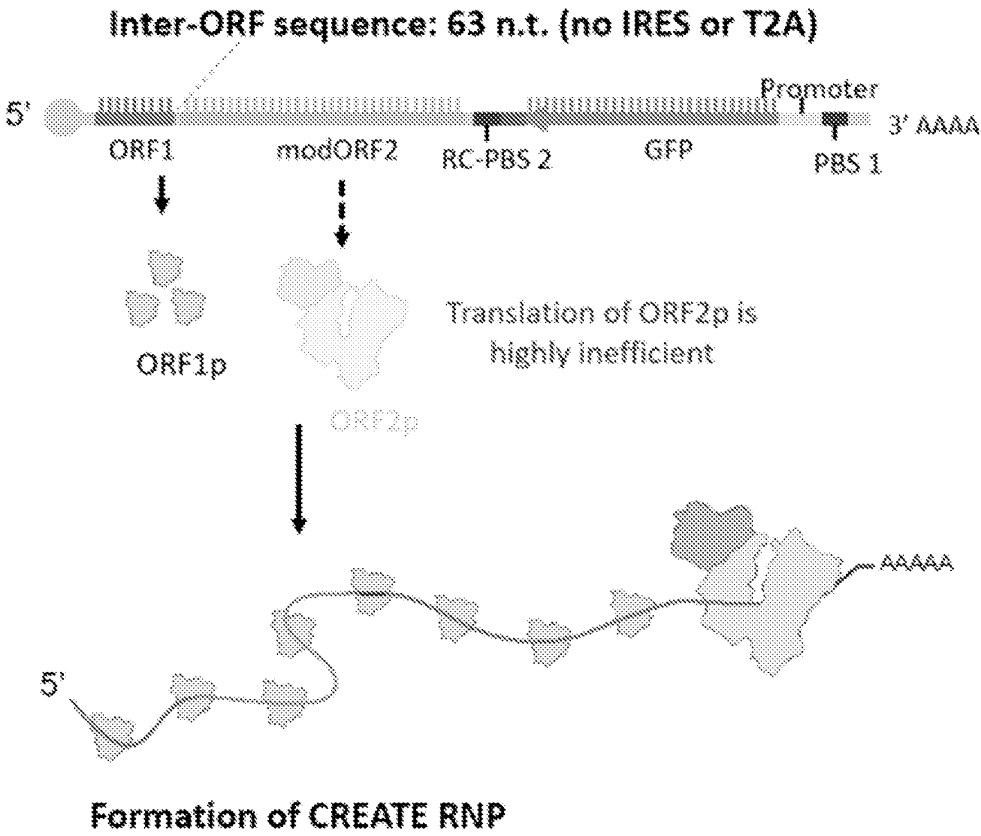


FIG. 37

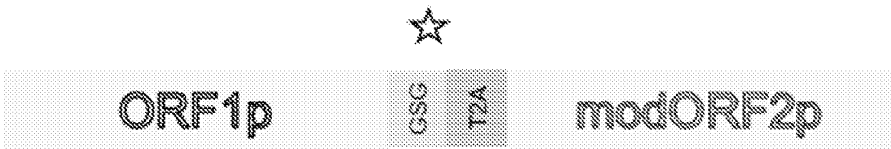


FIG. 38

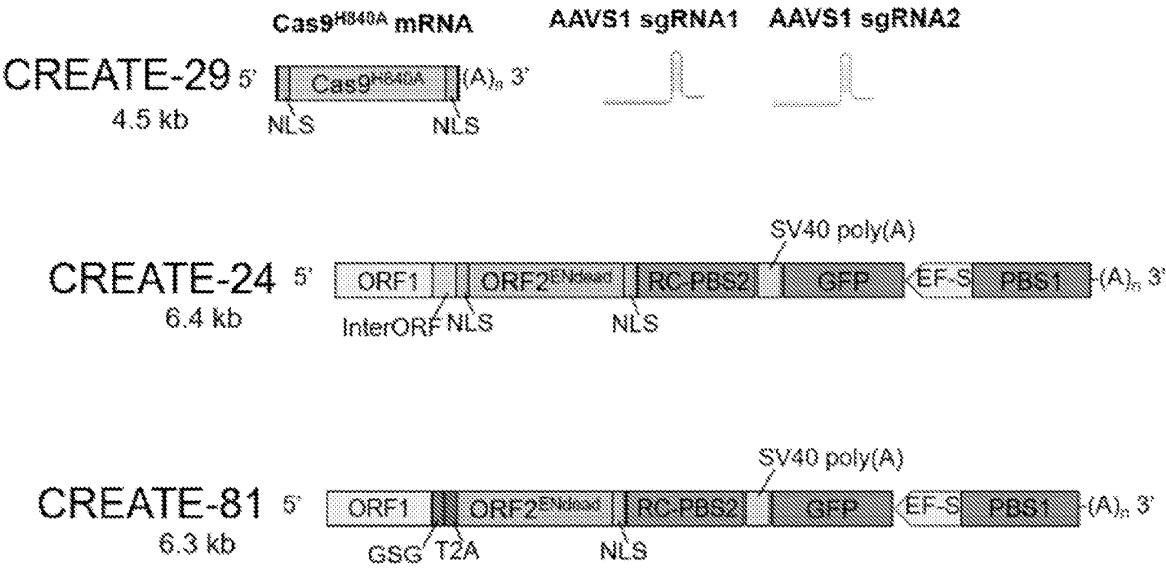


FIG. 39

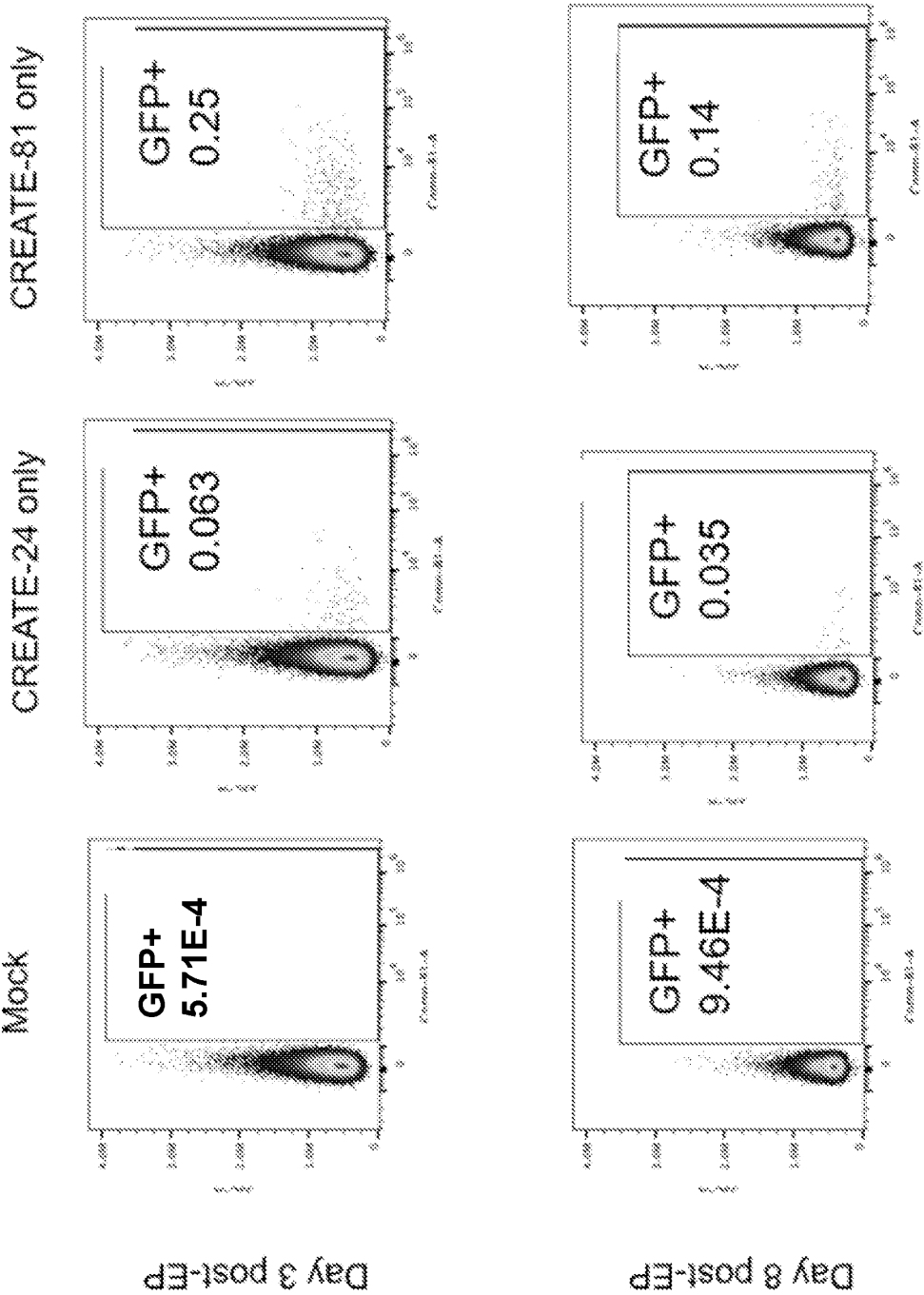
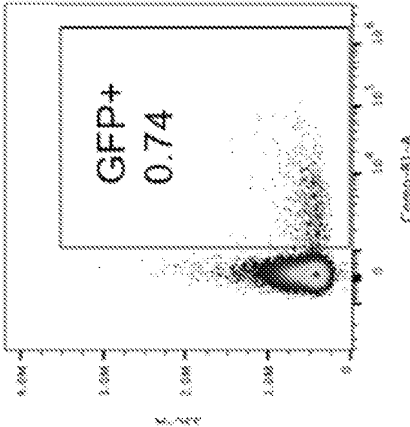
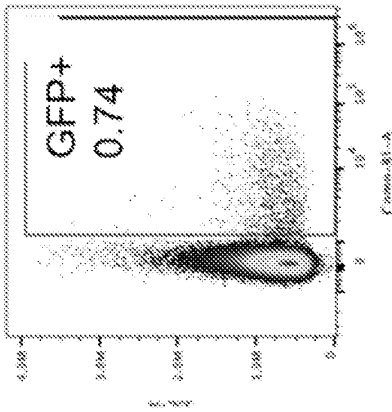


FIG. 40A

CREATE-81 ORF1_GSG-T2A_ORF2
+ CREATE-29 +sgRNA



CREATE-24 ORF1_InterORF_ORF2
+ CREATE-29 +sgRNA

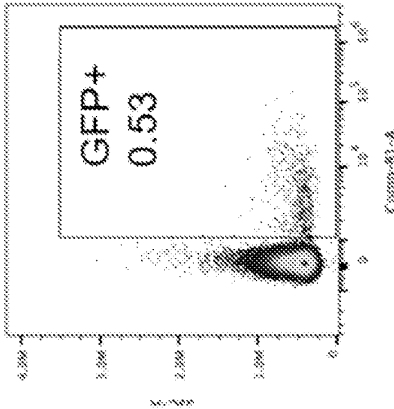
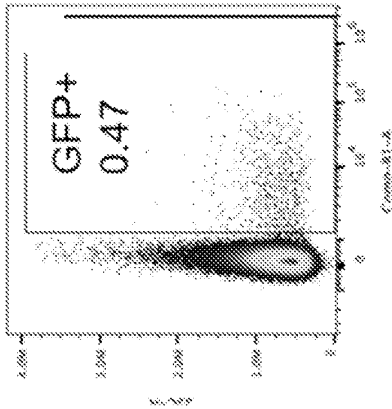


FIG. 40B

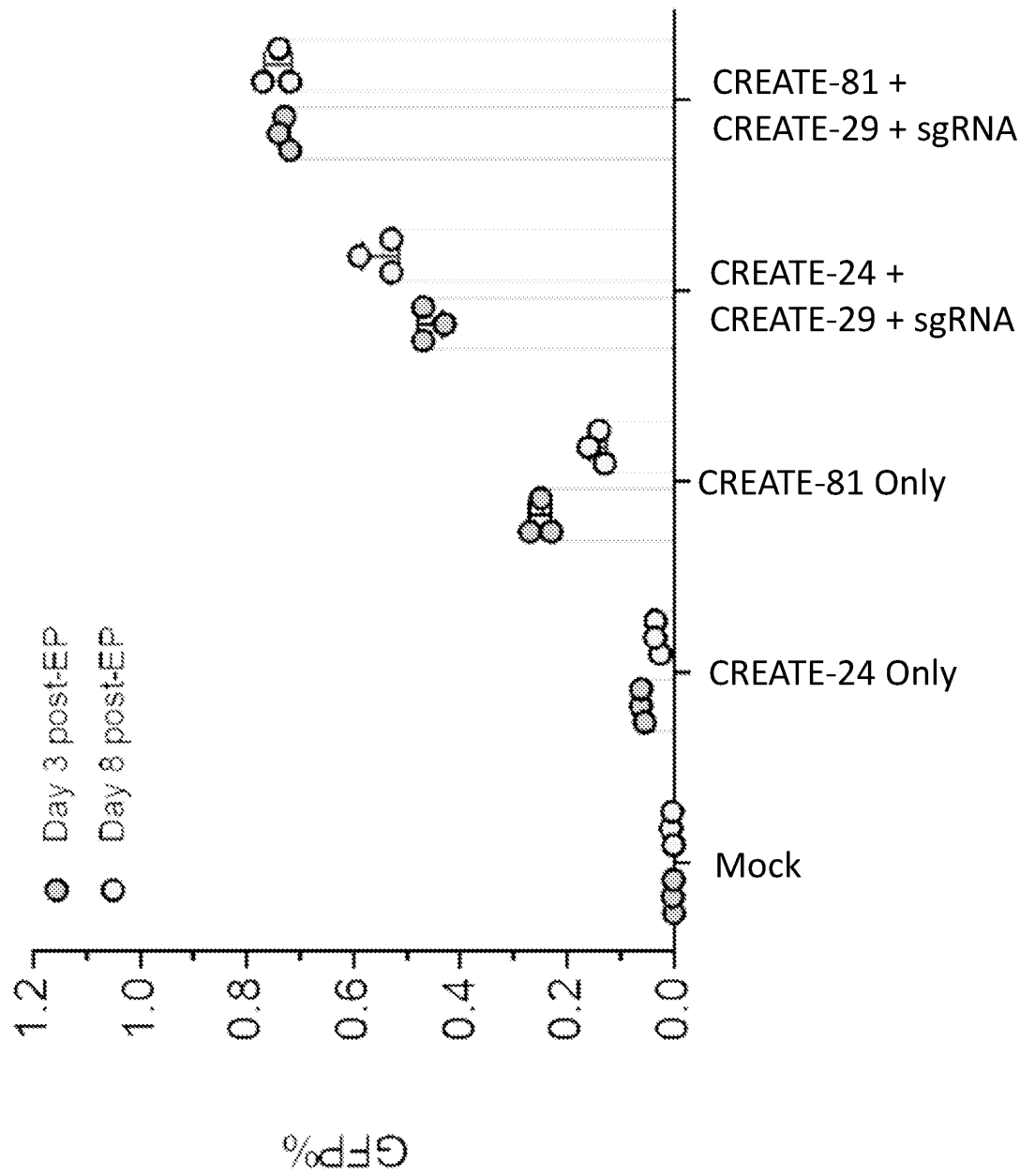


FIG. 40C

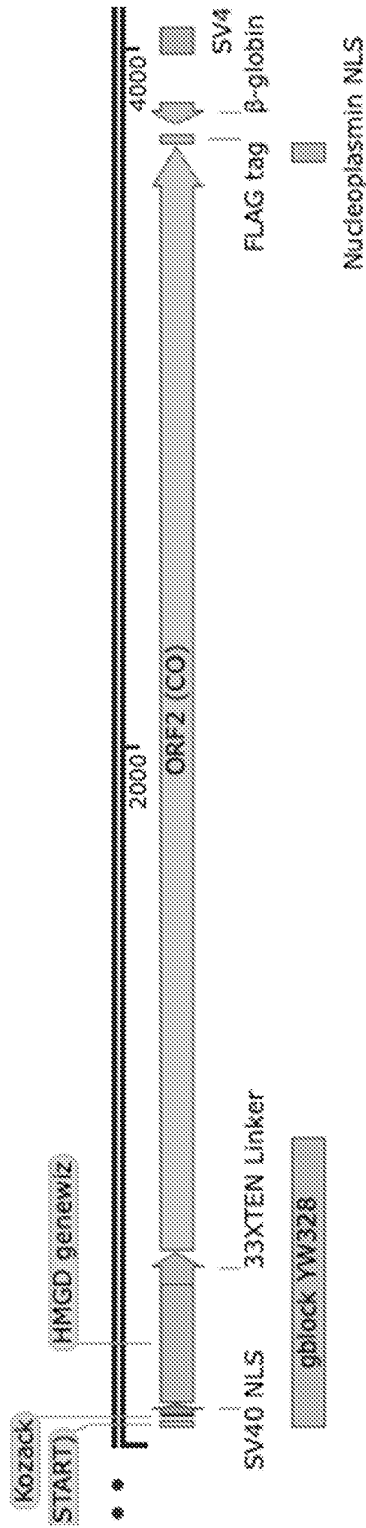


FIG. 41

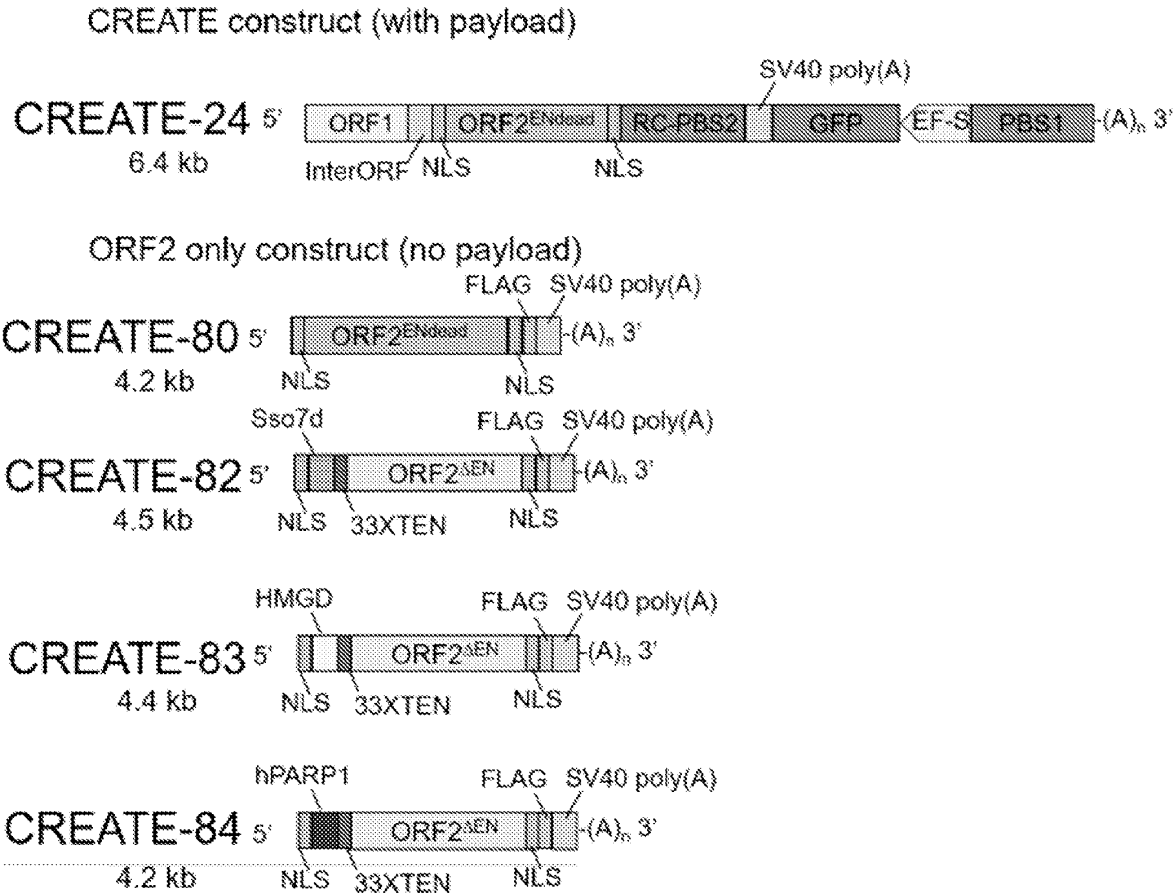
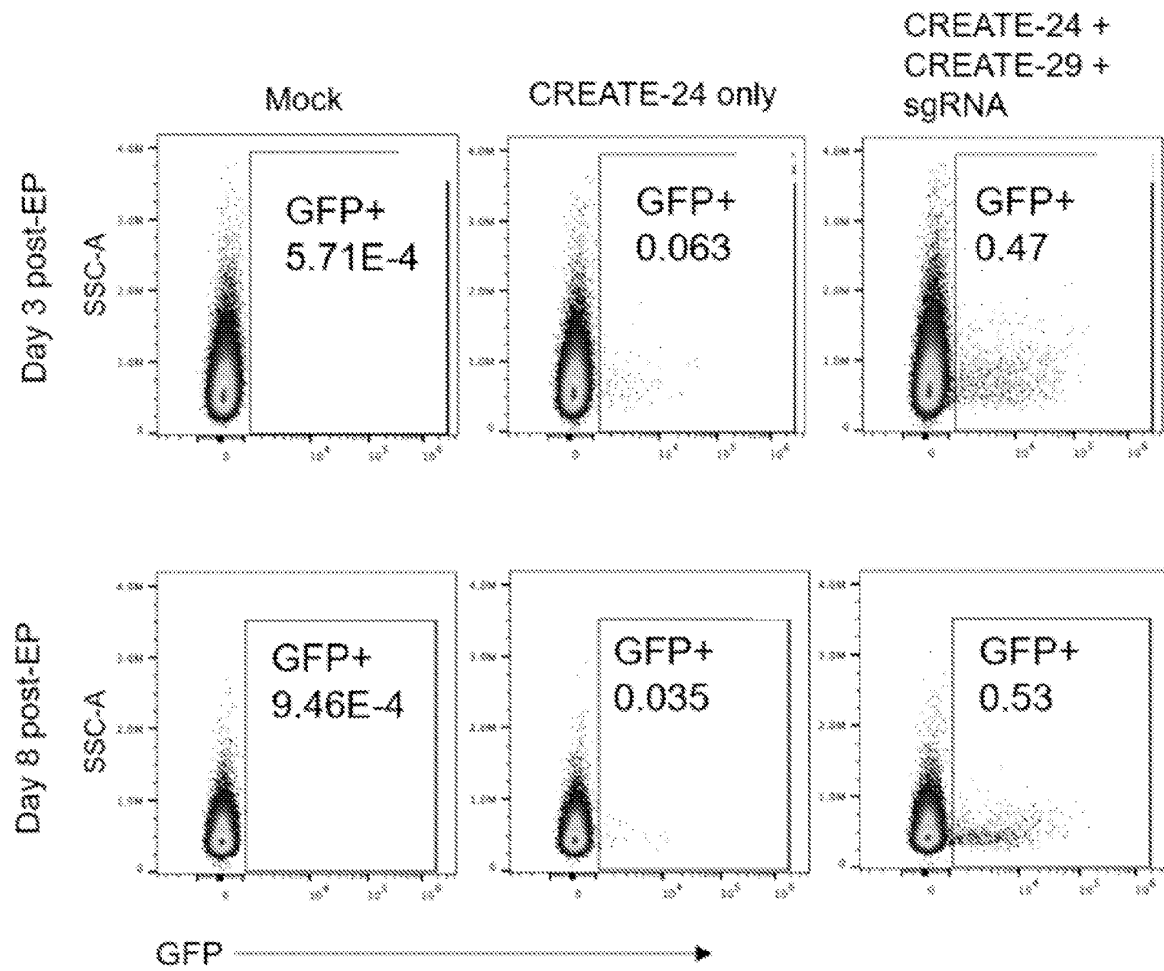


FIG. 42

**FIG. 43A**

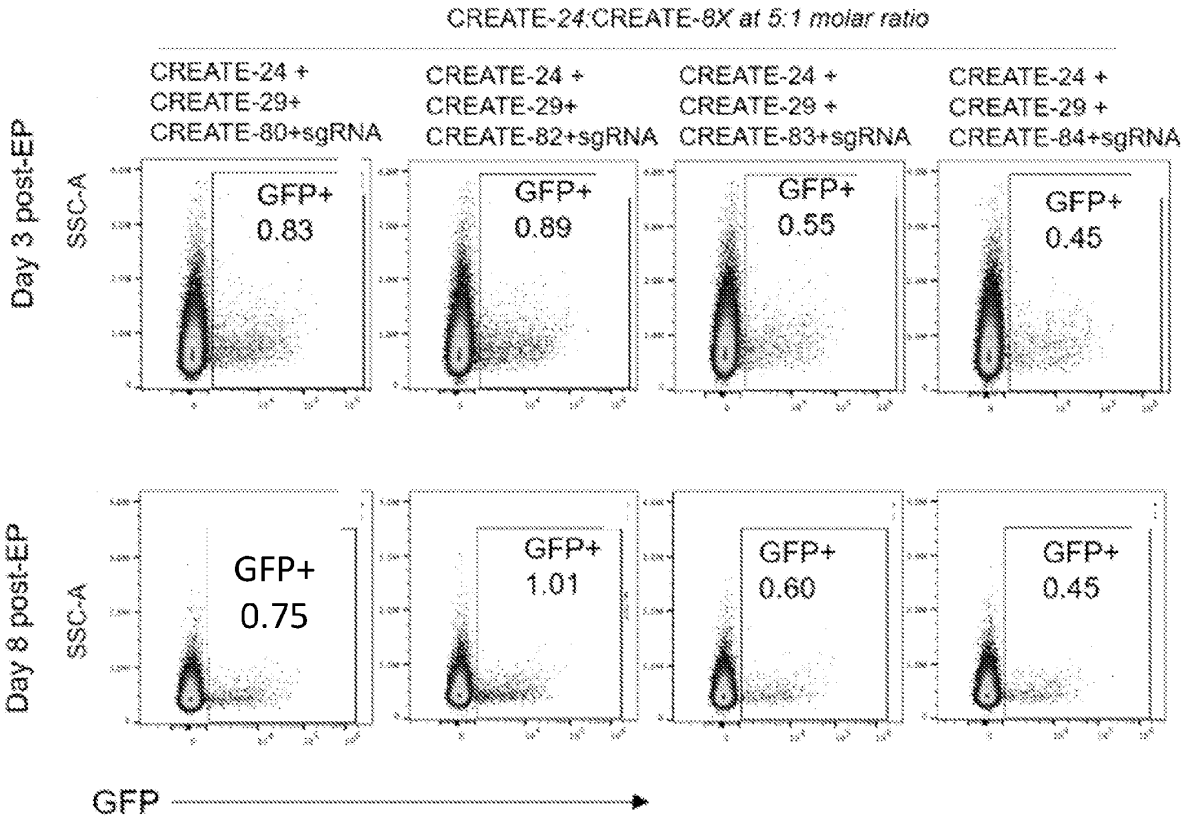


FIG. 43B

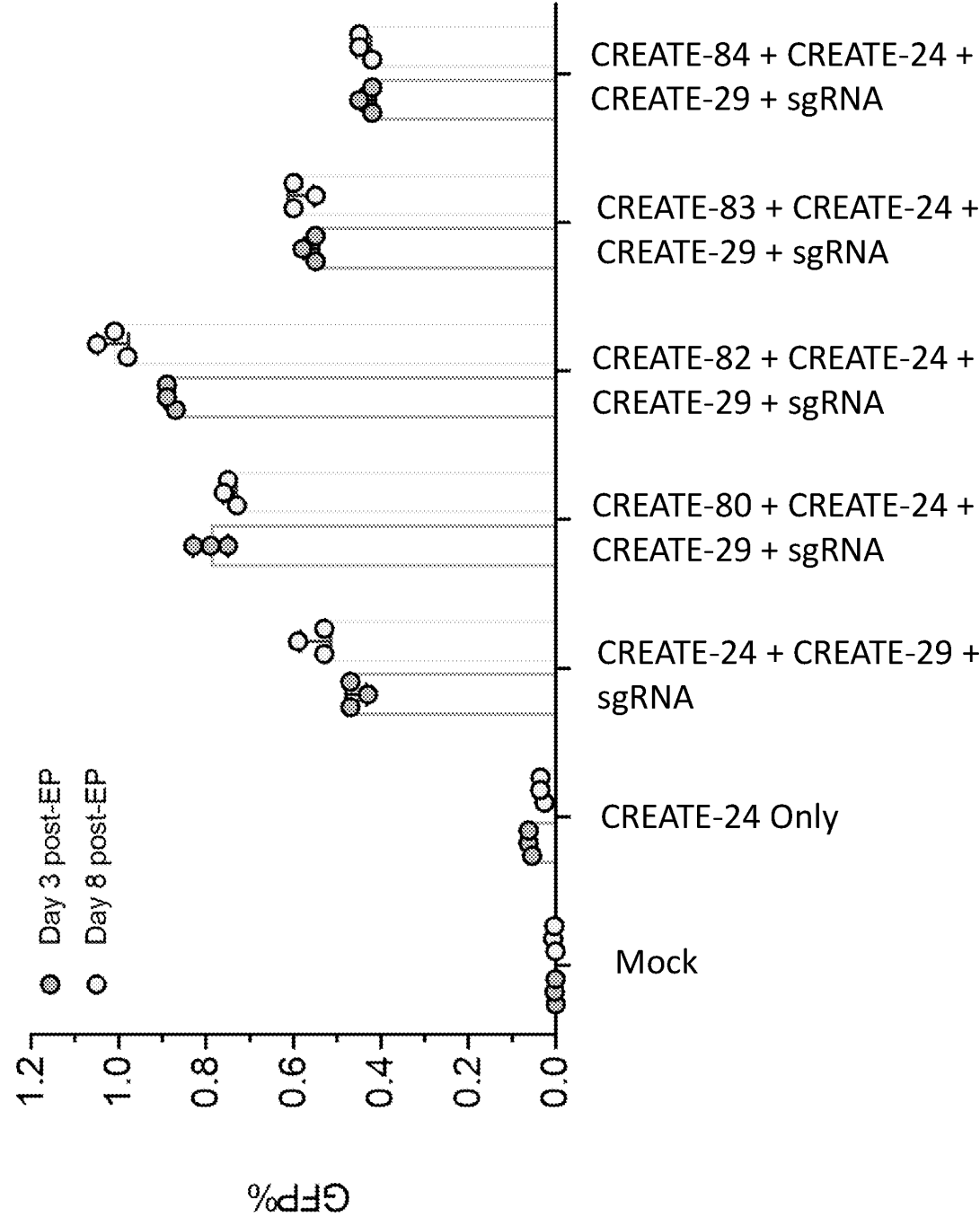


FIG. 43C

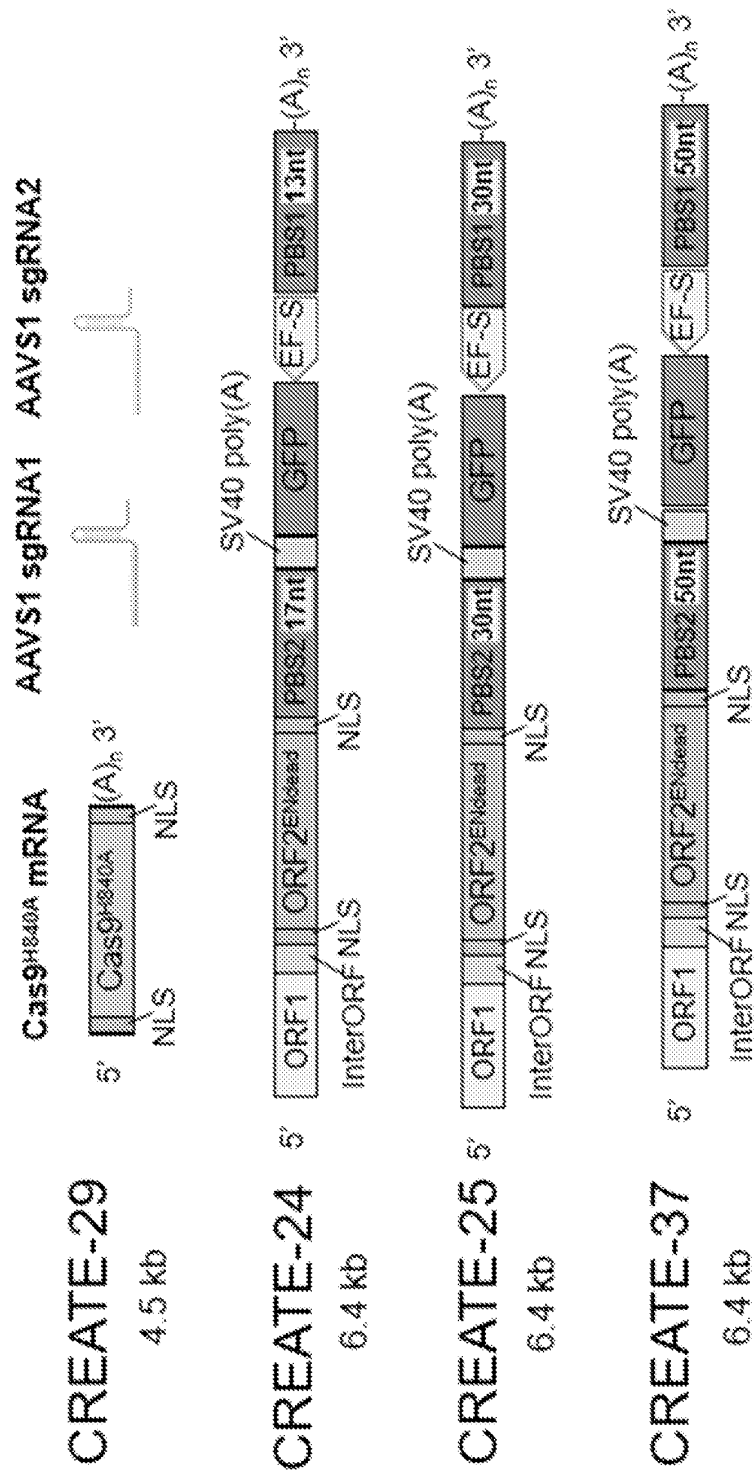


FIG. 44

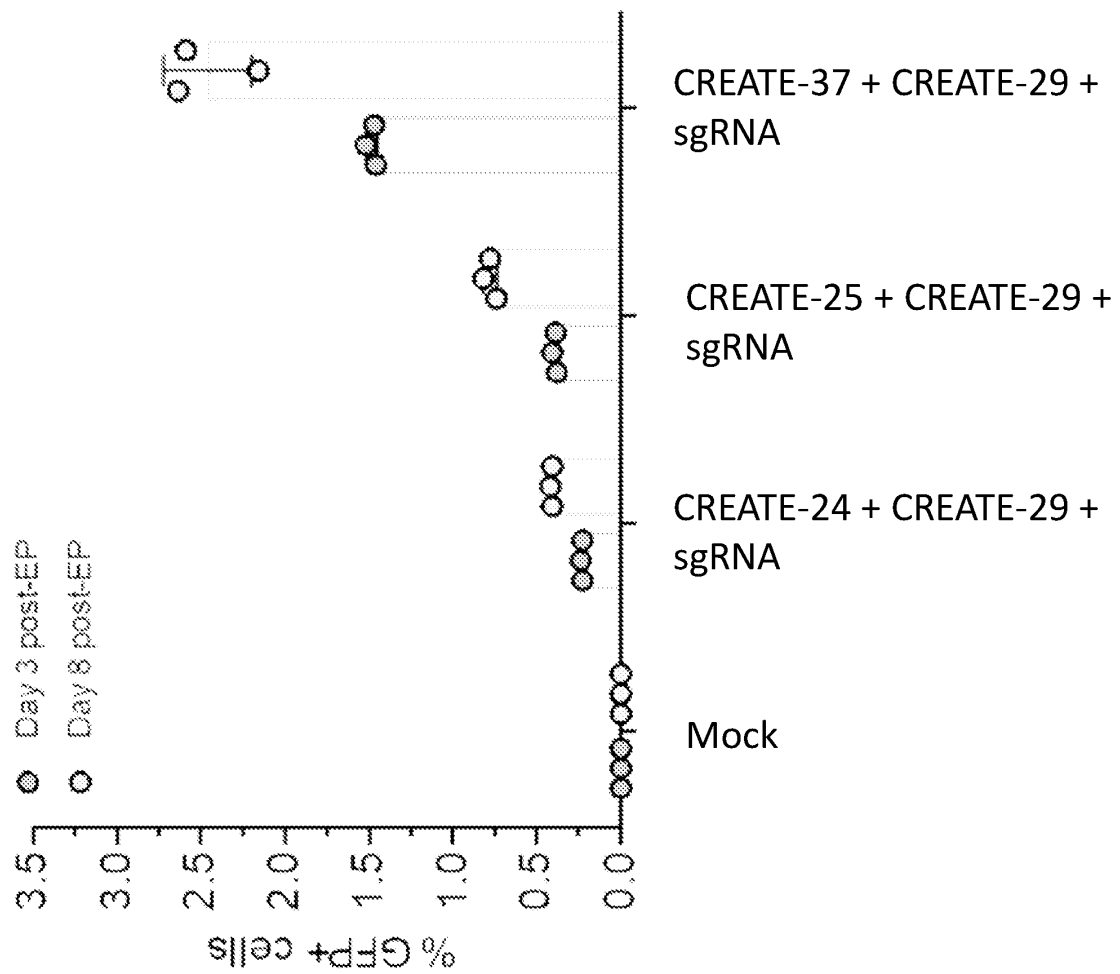


FIG. 45

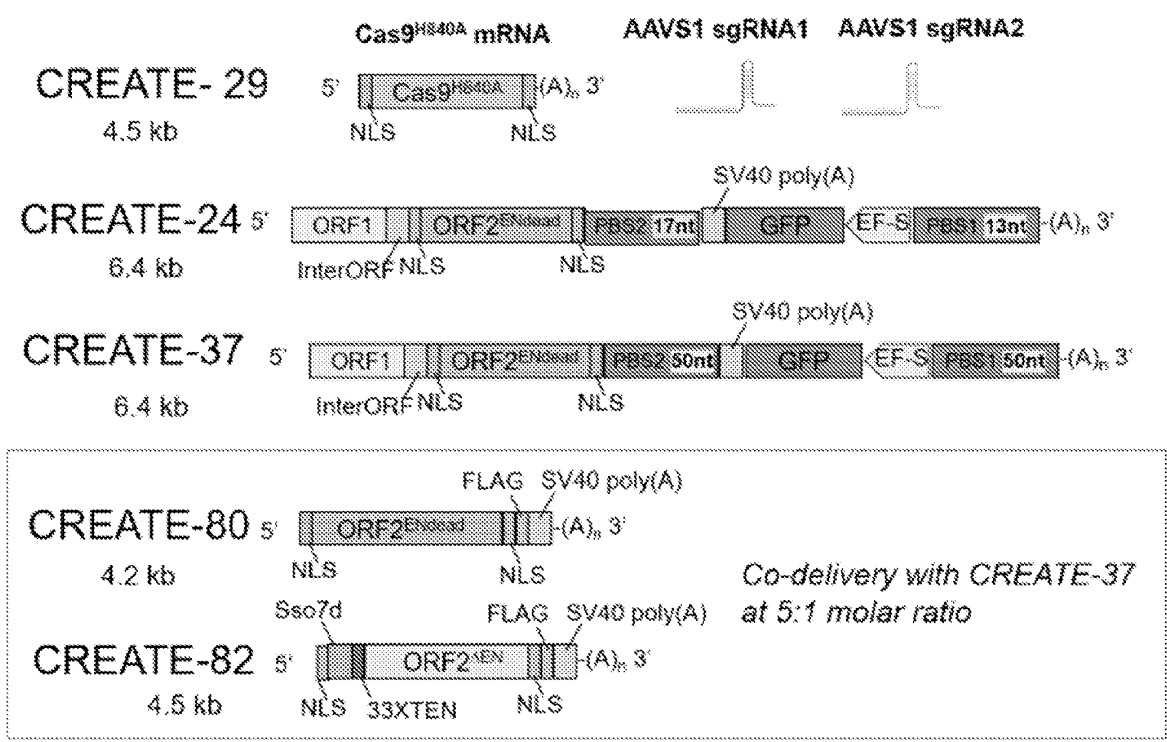


FIG. 46

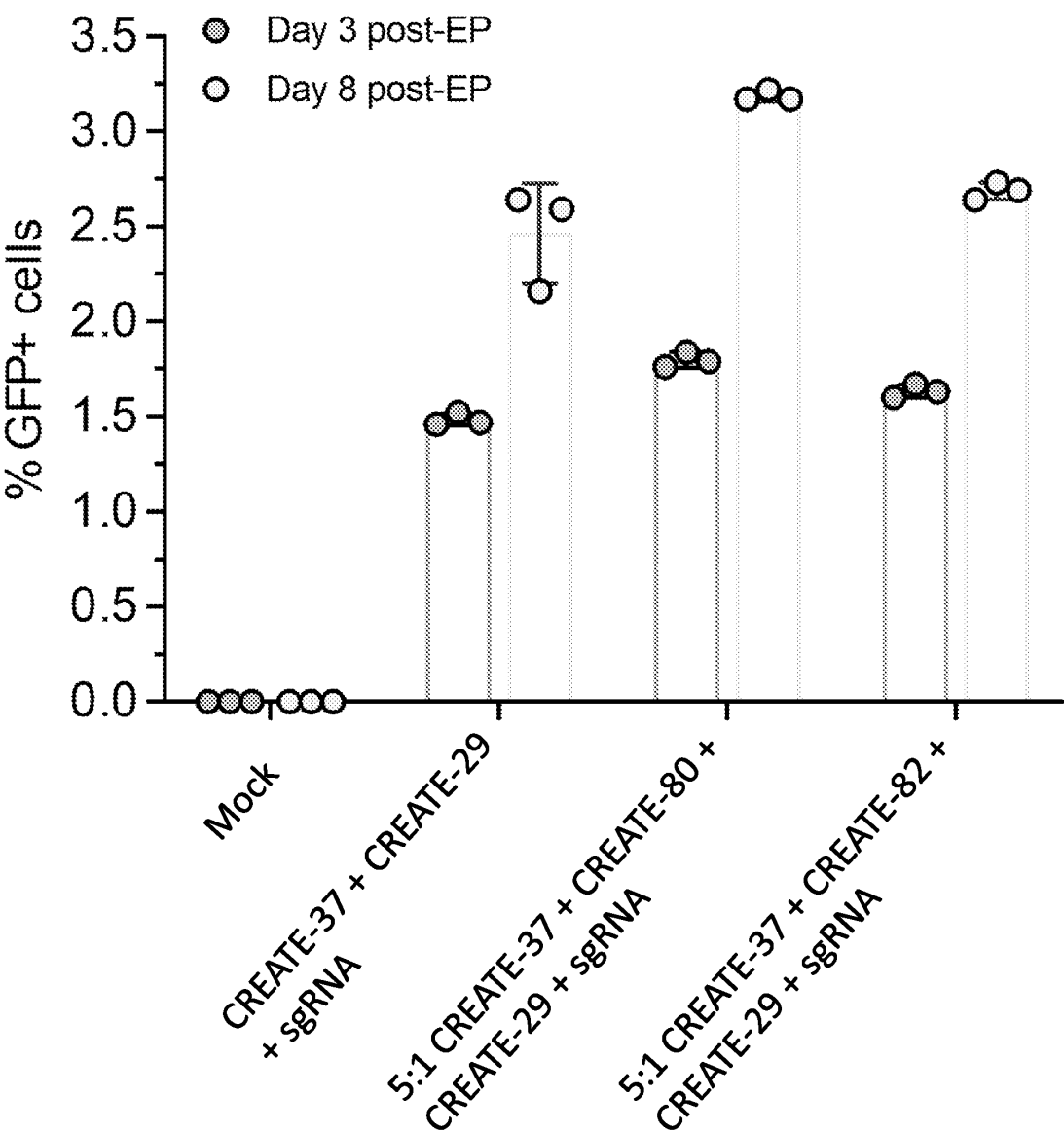


FIG. 47