

FIG. 1B

1. ITR1-5
2. ITR2-5
3. ITR3-5
4. ITR4-5
5. ITR5-5
6. ITR6-5
7. ITR7-5

	TRS	RBE	
	TTGGCCACTCCCTCT	TTGCGCGCTCGCTCGCTCGCT	-----GGGGCCTGGNGAC
1	TTGCCCCTCCCTCTCTGCGCGCTCGCTCGCTCGGT		-----GGGGCCTGCGGAC 49
2	TTGGCCACTCCCTCTCTGCGCGCTCGCTCGCTCACT		-----GAGGCCGGGCGAC 49
3	TTGGCCACTCCCTCTATGCGCACTCGCTCGCTCGGT		-----GGGGCCTGGCGAC 49
4	TTGGCCACTCCCTCTATGCGCGCTCGCTCACTCACT		-----CGGCCCTGGAGAC 49
5	-----CTCTCCCTCTGTGCGGTTCGCTCGCTCGCTGGCTCGTTGGGGGGGTGGCAGCT		55
6	TTGGCCACTCCCTCTCTGCGCGCTCGCTCGCTCACT		-----GAGGCCGGGCGAC 49
7	TTGGCCACTCCCTCTATGCGCGCTCGCTCGCTCGGT		-----GGGGCCTGCGGAC 49
			RBE
	CAAAG-GTCGCCAGACGGCCGNGCTCTGCCCGGCCGGCC		-----CCAGCGAGCGA
1	CAAAG-GTCGCCAGACGGCAGAGCTCTGCTCTGCCGGCC		-----CCAACGAGCGA 98
2	CAAAG-GTCGCCAGACGGCCGGCTTTGCCCGGCCGGCC		-----TCAGTGAGCGA 98
3	CAAAG-GTCGCCAGACGGACGTGCTTTGCACGTCCGGCC		-----CCAACGAGCGA 98
4	CAAAG-GTCTCCAGACTGCCGGCTCTGGCCGGCAGGGC		-----CGAGTGAGTGA 98
5	CAAAGAGCTGCCAGACGACGGCCCTCTGGCCGTGCCCCCCCCAAACGAGCCAGCGAGCGA		115
6	CAAAG-GTCGCCAGACGGCCGGCTTTGCCCGGCCGGCC		-----TCAGTGAGCGA 98
7	CAAAG-GTCGCCAGACGGCAGAGCTCTGCTCTGCCGGCC		-----CCAACGAGCGA 98
			D sequence
	GGGAGCGCGCAAGAGGGAGTGGCCAACTCCATCACTAGGGGTNCCT		
1	GCGAGCGCGCAGAGAGGGAGTGGCCAACTCCATCACTAGGGGTAA		-----143
2	GCGAGCGCGCAGAGAGGGAGTGGCCAACTCCATCACTAGGGGTTCCT		-----145
3	GCGAGTGGCGCATAGAGGGAGTGGCCAACTCCATCACTAGAGGTAT		-----143
4	GCGAGCGCGCATAGAGGGAGTGGCCAACTCCATCATCTAGGTTTGGCC		-----146
5	GCGAAAGCGGACAGGGGGGAGAGTGGCCAACTCTCAAGCAAGGGGGTTTTGT		167
6	GCGAGCGCGCAGAGAGGGAGTGGCCAACTCCATCACTAGGGGTTCCT		-----145
7	GCGAGCGCGCATAGAGGGAGTGGCCAACTCCATCACTAGGGGTACCG		-----145

FIG. 1C

1. ITR1-3
2. ITR2-3
3. ITR3-3
4. ITR4-3
5. ITR5-3
6. ITR6-3
7. ITR7-3

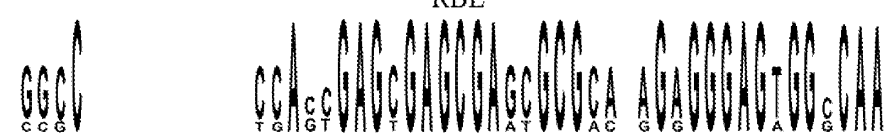
	D sequence	TRS	RBE	
	---NNTACCCCTAG--TGATGGAGTTGGGCACTCCCTCTATGCGCGCTCGCTCGCTCGG			
1	-----TTACCCCTAG--TGATGGAGTTGCCACTCCCTCTCTGCGCGCTCGCTCGCTCGG			53
2	---AGGAACCCCTAG--TGATGGAGTTGGCCACTCCCTCTCTGCGCGCTCGCTCGCTCAC			55
3	-----ATACCTCTAG--TGATGGAGTTGGCCACTCCCTCTATGCGCACTCGCTCGCTCGG			53
4	---GGCAAACCAGA--TGATGGAGTTGGCCACATTAGCTATGCGCGCTCGCTCACTCAC			54
5	TACAAAACCTCCTTGCTTGAGAGTGTGGCACTCTCCCCCTGTGCGGTTTCGCTCGCTCGC			60
6	-----ATACCCCTAG--TGATGGAGTTGCCACTCCCTCTATGCGCGCTCGCTCGCTCGG			53
7	---CGGTACCCCTAG--TGATGGAGTTGGCCACTCCCTCTATGCGCGCTCGCTCGCTCGG			55
	T-----GGGGCCTGCNGACCAAAG-GTCNCCAGACGGCNGGCTCTGCNCGGCC			
1	T-----GGGGCCTGCGGACCAAAG-GTCCGACAGCGGACAGAGCTCTGCTCTGCC			101
2	T-----GAGGCGGGGACCAAAG-GTCGCCGACGCGCGGGCTTTGCCCGGGC			103
3	T-----GGGGCCTGCGGACCAAAG-GTCGCCAGACGGACGTGCTTTGCACGTCC			101
4	T-----CGGCCCTGGAGACCAAAG-GTCTCCAGACTGCCGGCCTCTGGCCGGCA			102
5	TGGCTCGTTTGGGGGGTGGCAGCTCAAAGAGCTGCCAGACGACGGCCCTCTGGCCGTCG			120
6	T-----GGGGCGGGCAGAGCAGAG-CTCTGCCGTCTGCGGACCTTTGGTCCGCA			101
7	T-----GGGGCCTGCGGACCAAAG-GTCCGACAGCGGACAGAGCTCTGCTCTGCC			103
	RBE			
				
	GGCC-----CCACCGAGCGAGCGAGCGCGCATAGAGGGAGTGGCCAA			
1	GGCC-----CCACCGAGCGAGCGAGCGCGCAGAGAGGGAGTGGGCAA			143
2	GGCC-----TCAGTGAGCGAGCGAGCGCGCAGAGAGGGAGTGGCCAA			145
3	GGCC-----CCACCGAGCGAGCGAGTGCGCATAGAGGGAGTGGCCAA			143
4	GGGC-----CGAGTGAGTGAGCGAGCGCGCATAGAGGGAGTGGCCAA			144
5	CCCCCCCCAACGAGCCAGCGAGCGAGCGAACGCGACAGGGGGGAGAG-----			167
6	GGCC-----CCACCGAGCGAGCGAGCGCGCATAGAGGGAGTGGGCAA			143
7	GGCC-----CCACCGAGCGAGCGAGCGCGCATAGAGGGAGTGGCCAA			145

FIG. 2

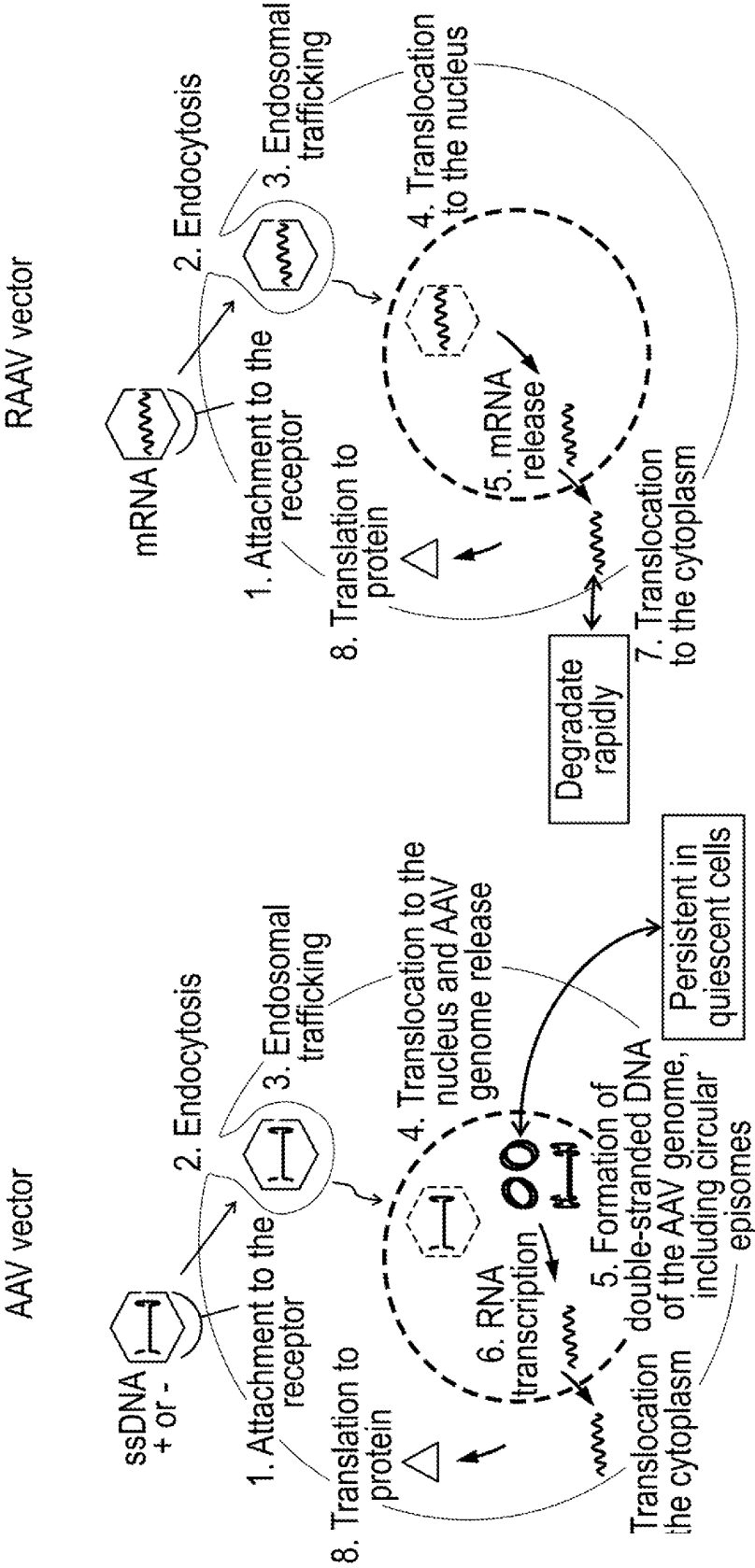


FIG. 3

The schematic diagram of RAAV-ITR transgene plasmids

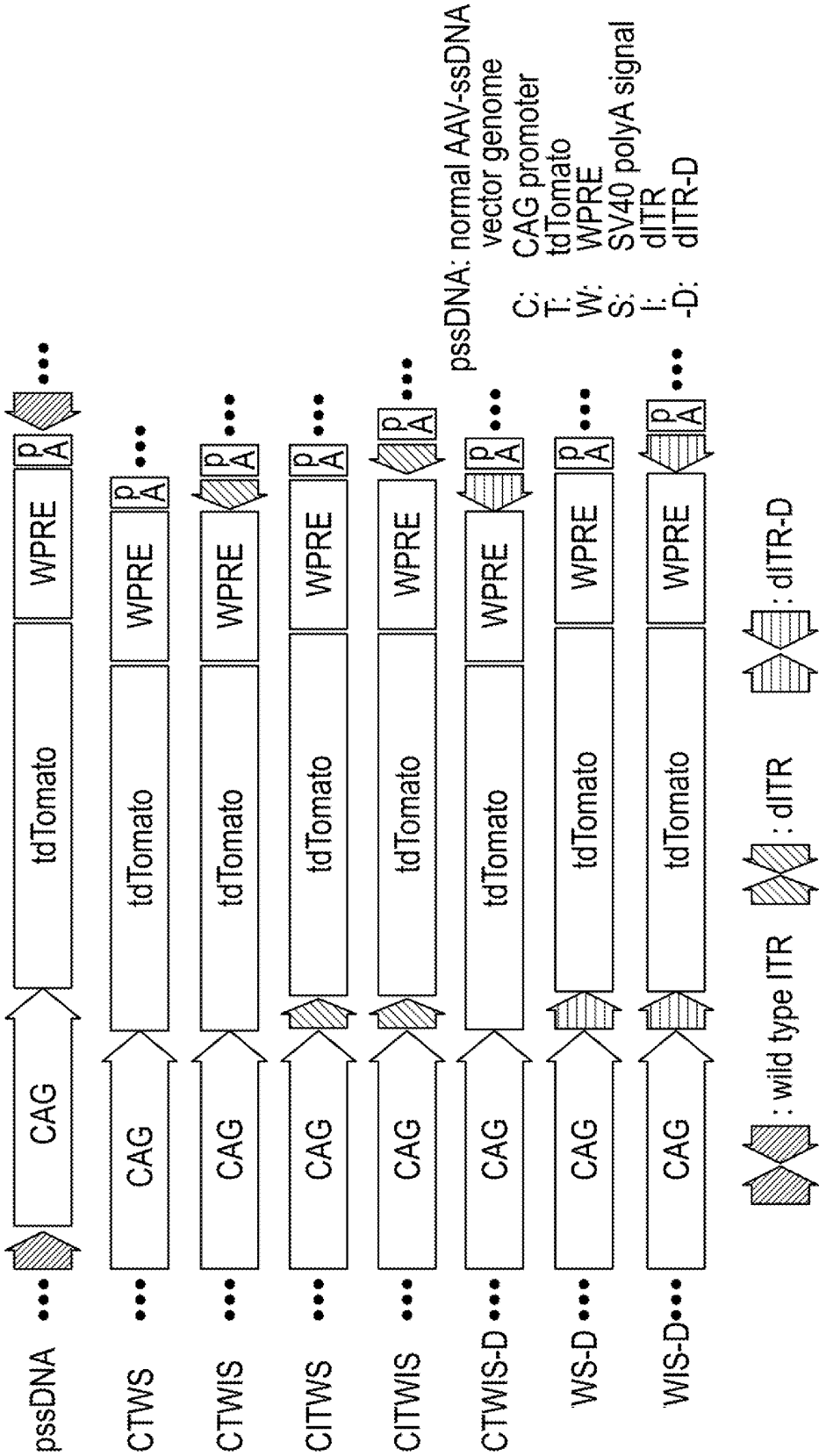


FIG. 4

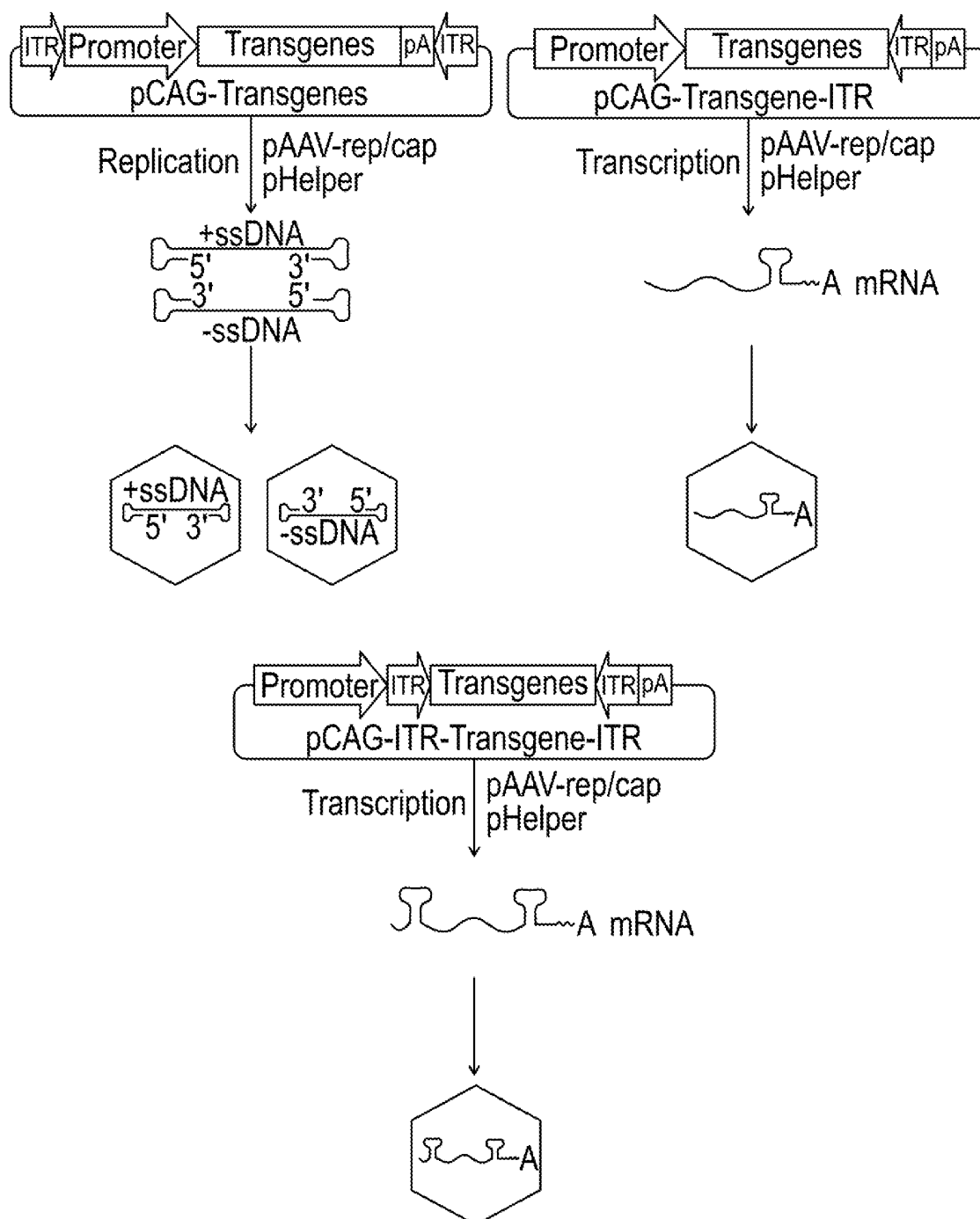


FIG. 5A

Flowchart of RAAV titration

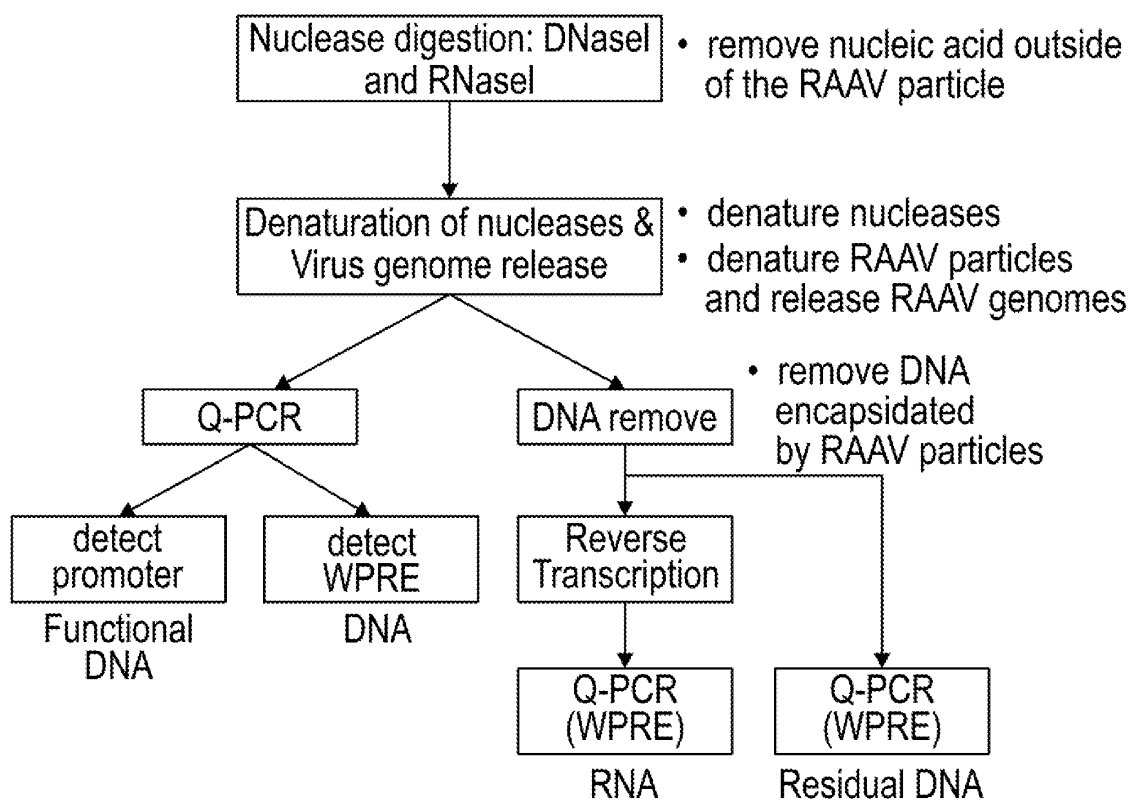
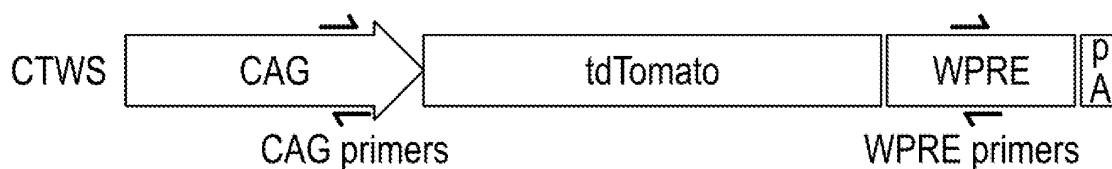
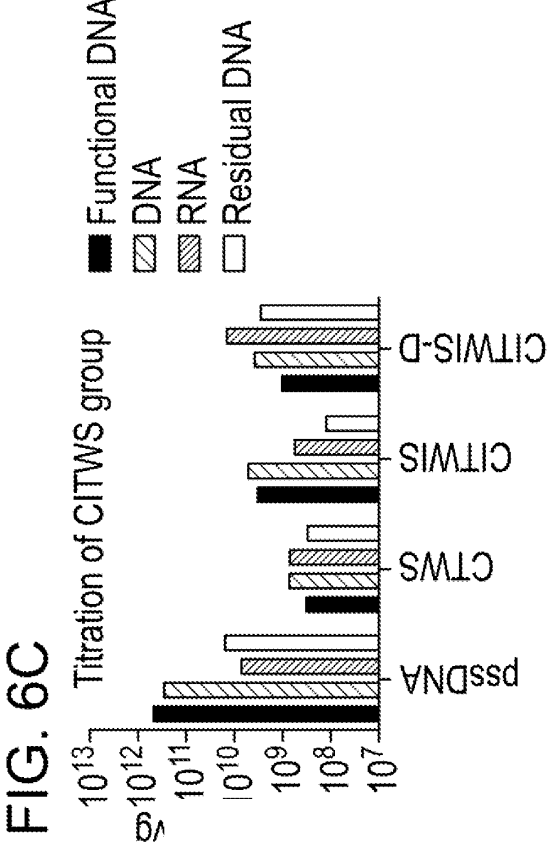
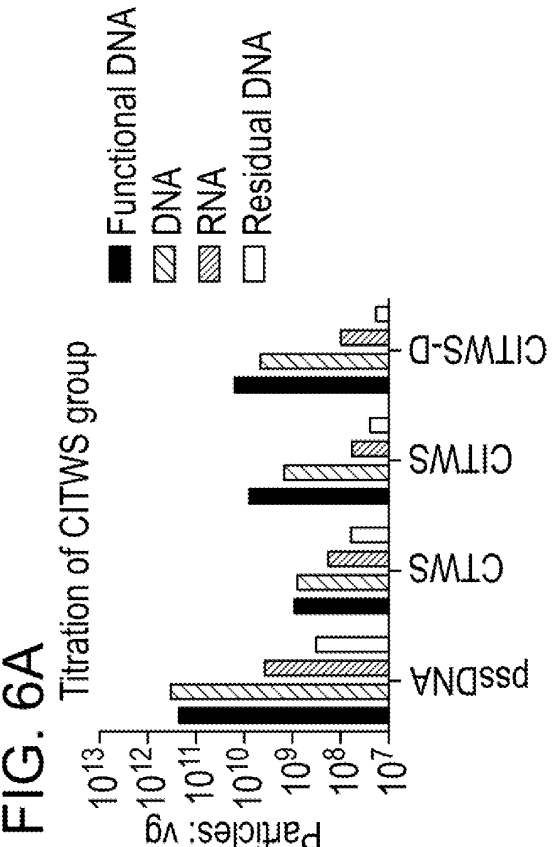
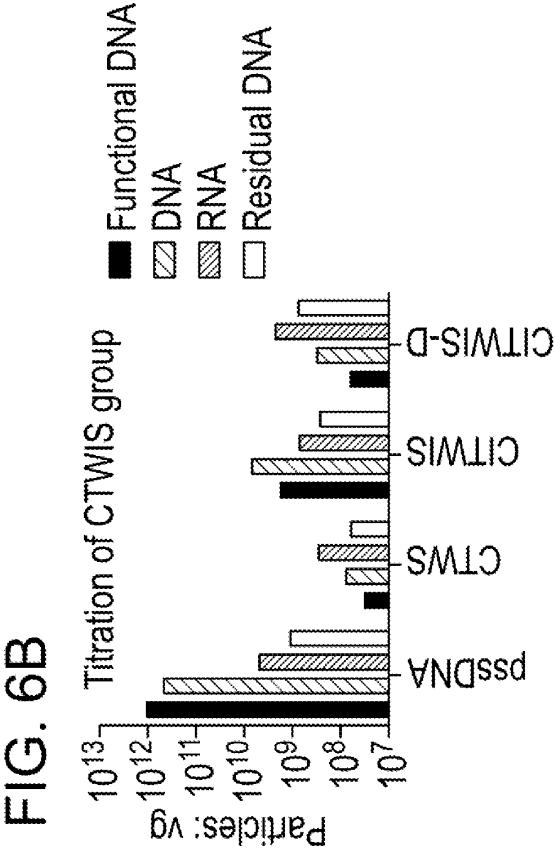


FIG. 5B

Primers and probes for Q-PCR





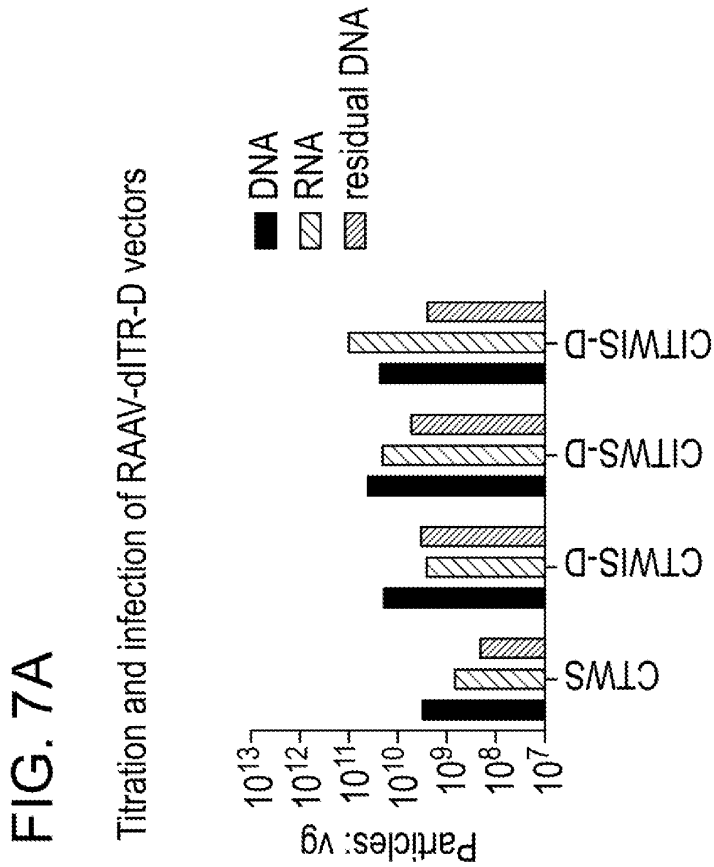
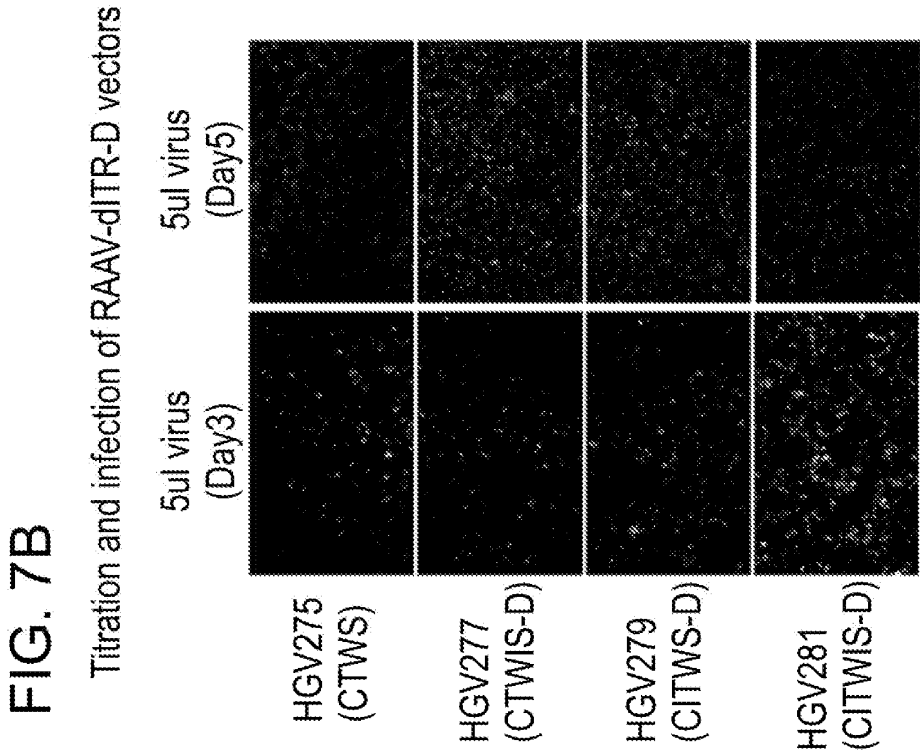


FIG. 8A

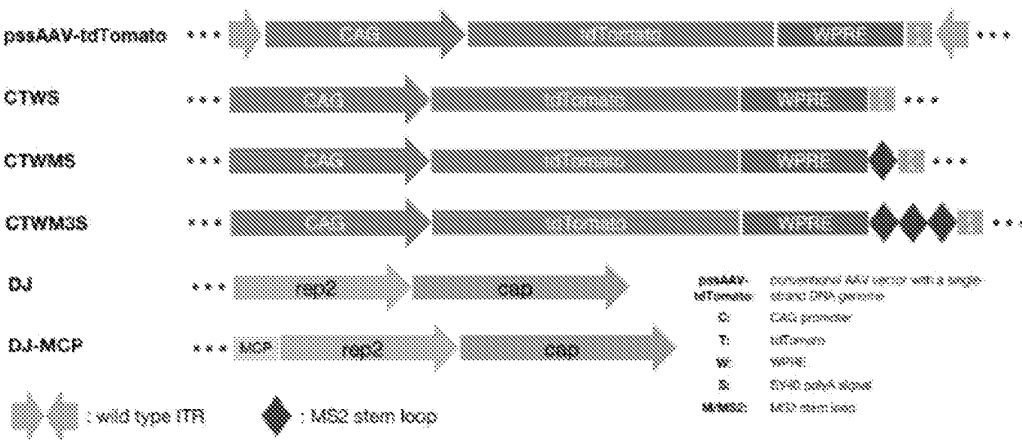


FIG. 8B

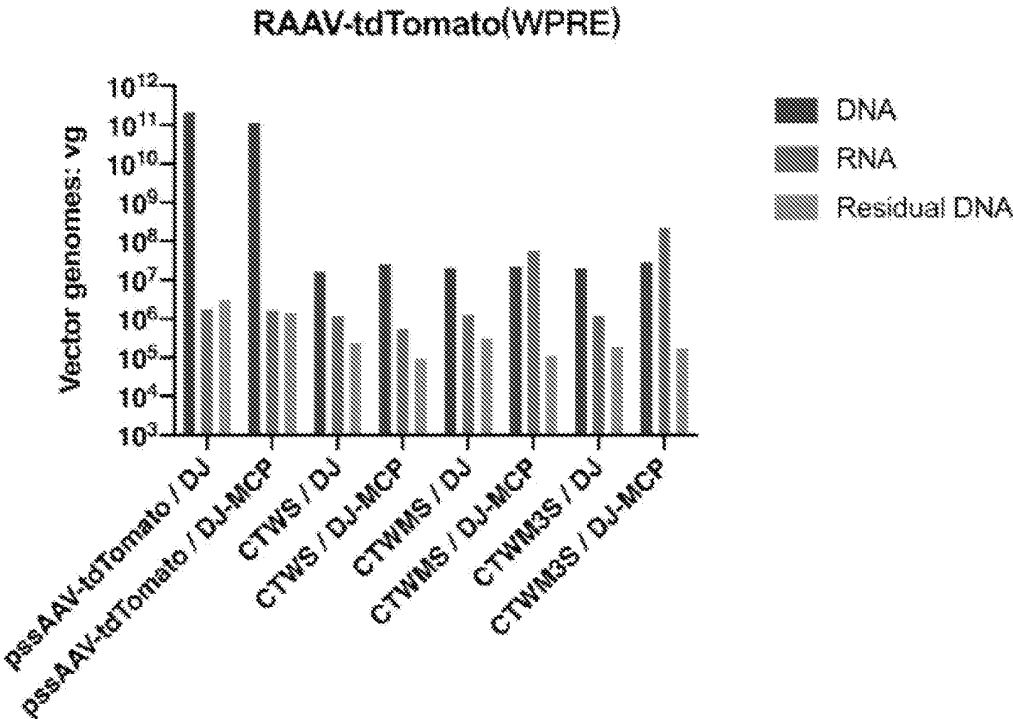


FIG. 9A

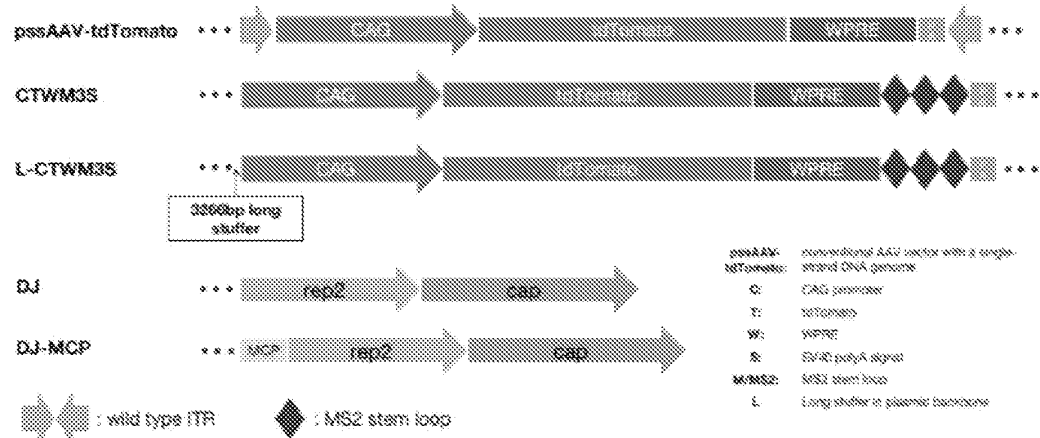


FIG. 9B

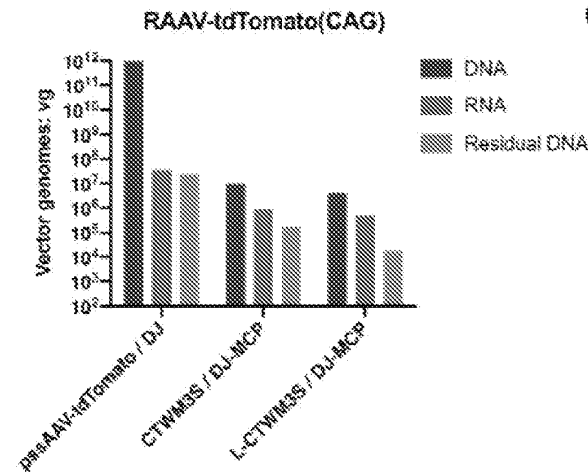


FIG. 9C

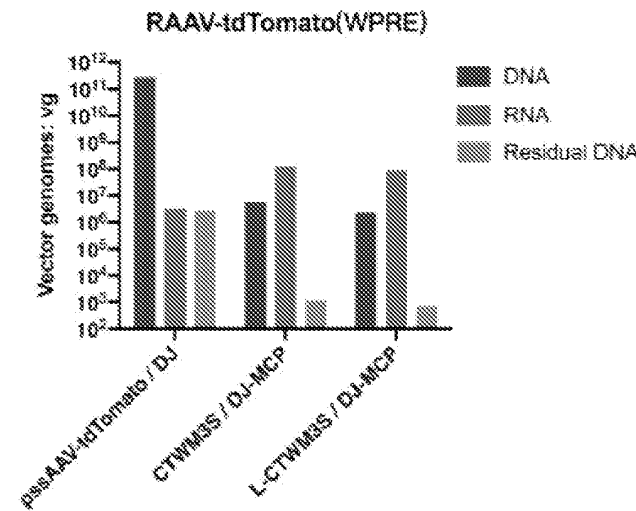


FIG. 10A
RAAV-Cre(CAG)

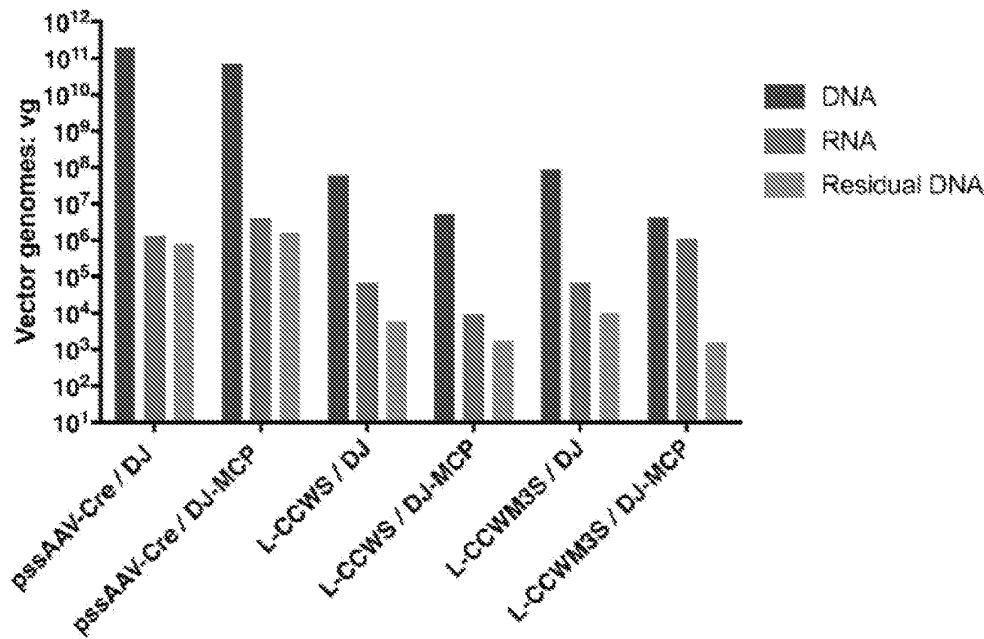


FIG. 10B
RAAV-Cre(WPRE)

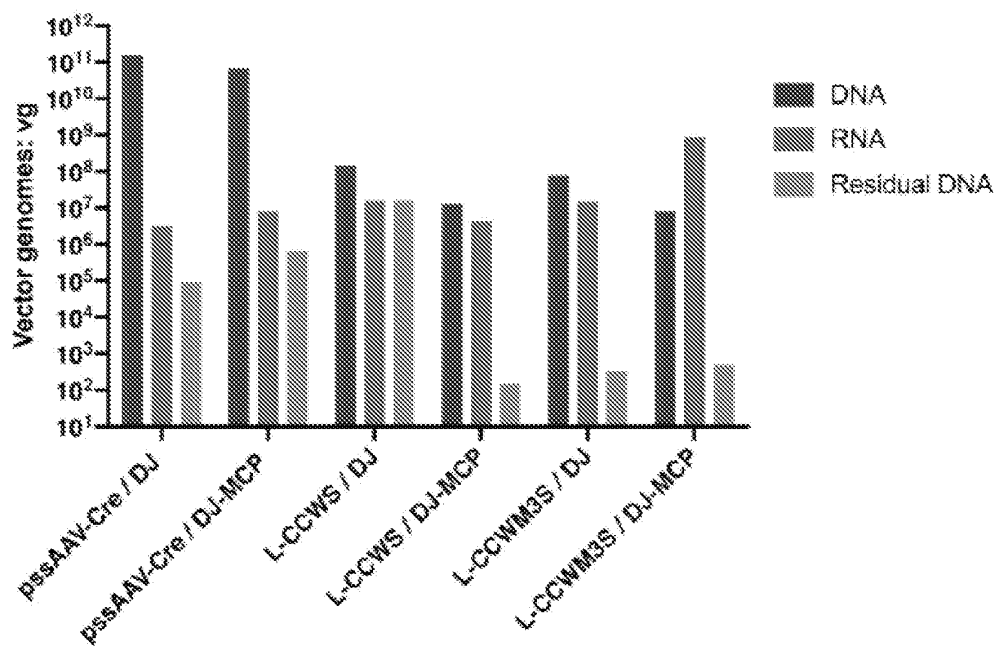


FIG. 11A

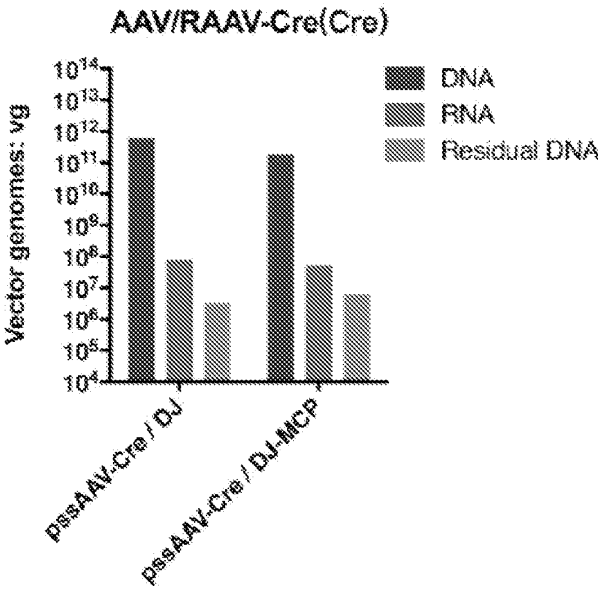


FIG. 11B

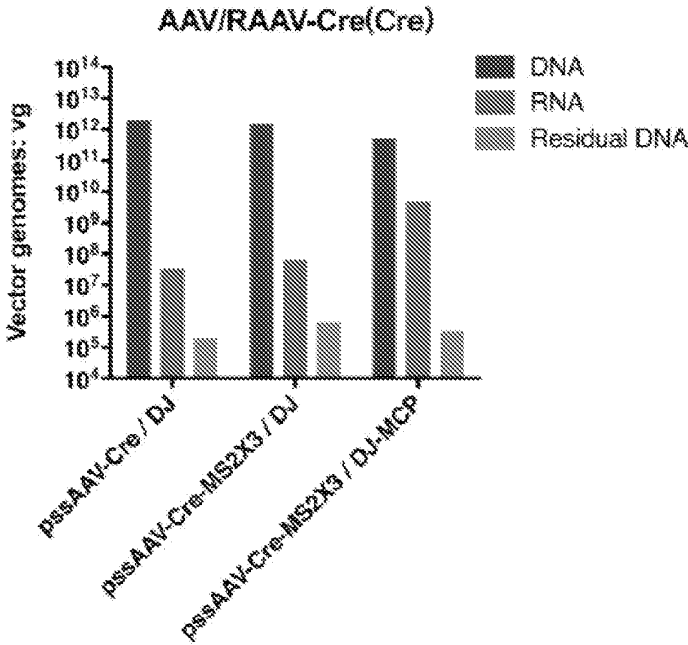


FIG. 12A

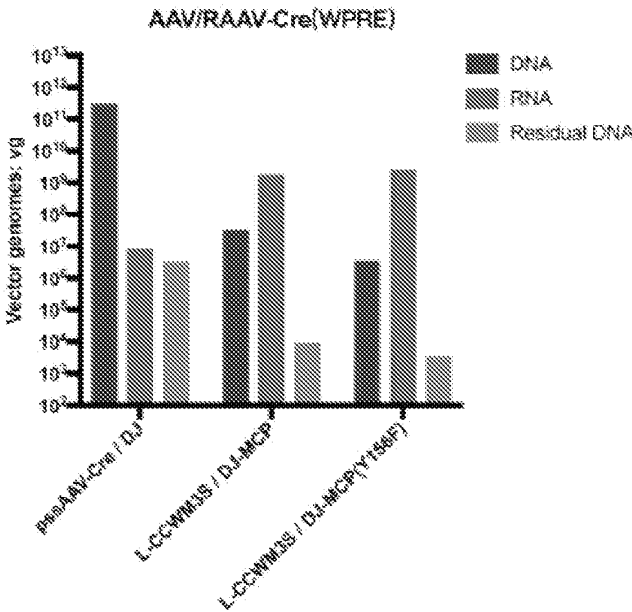


FIG. 12B

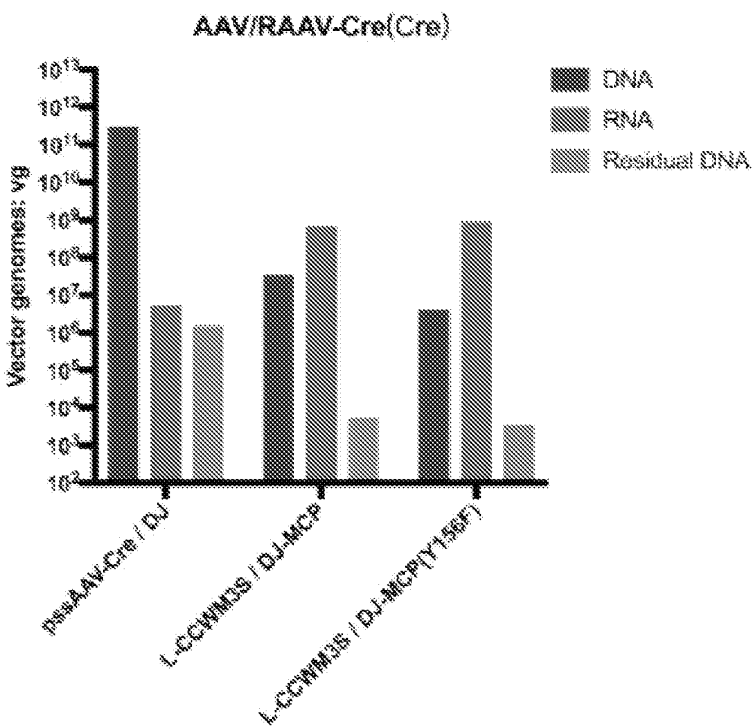


FIG. 12C

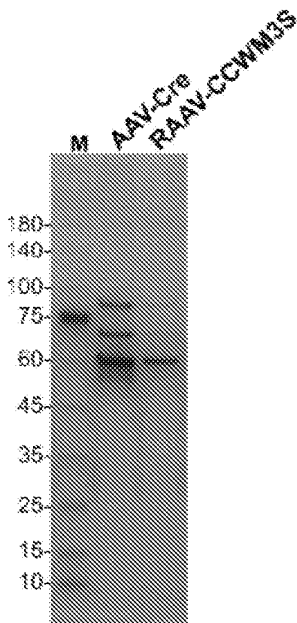


FIG. 12D

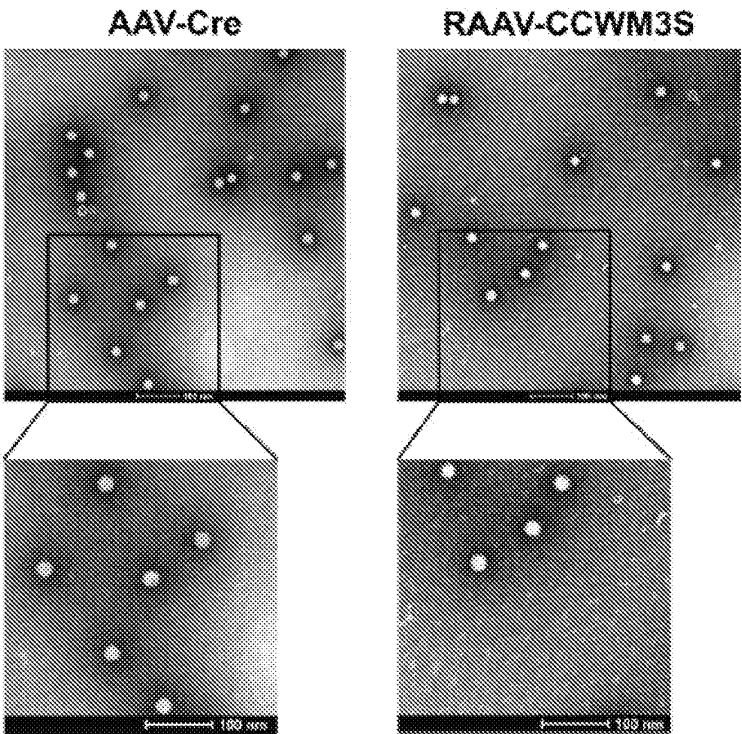


FIG. 13A

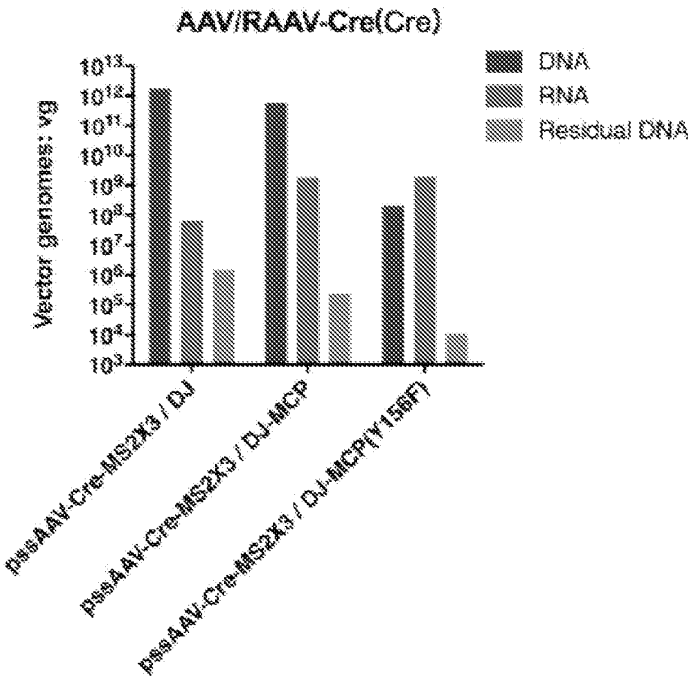


FIG. 13B

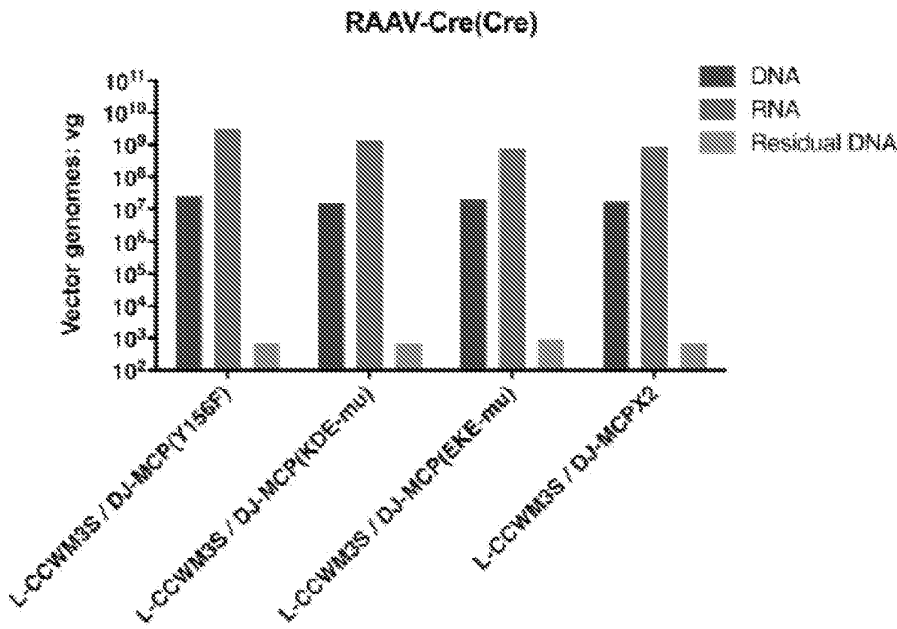


FIG. 14A

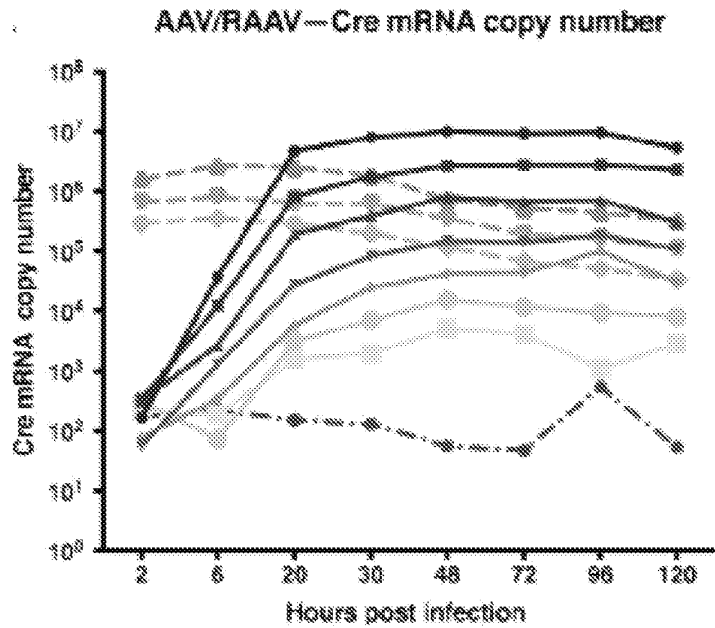


FIG. 14B

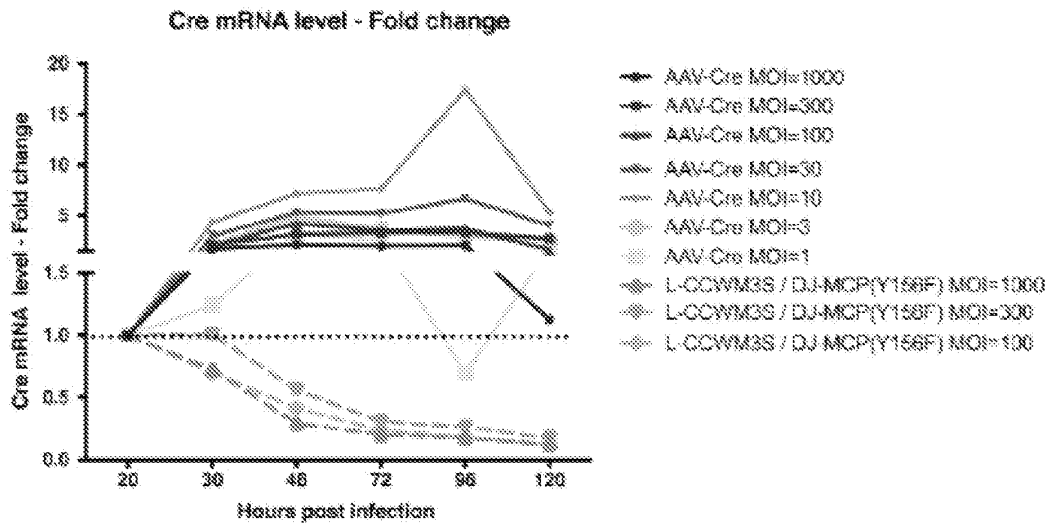


FIG. 14C

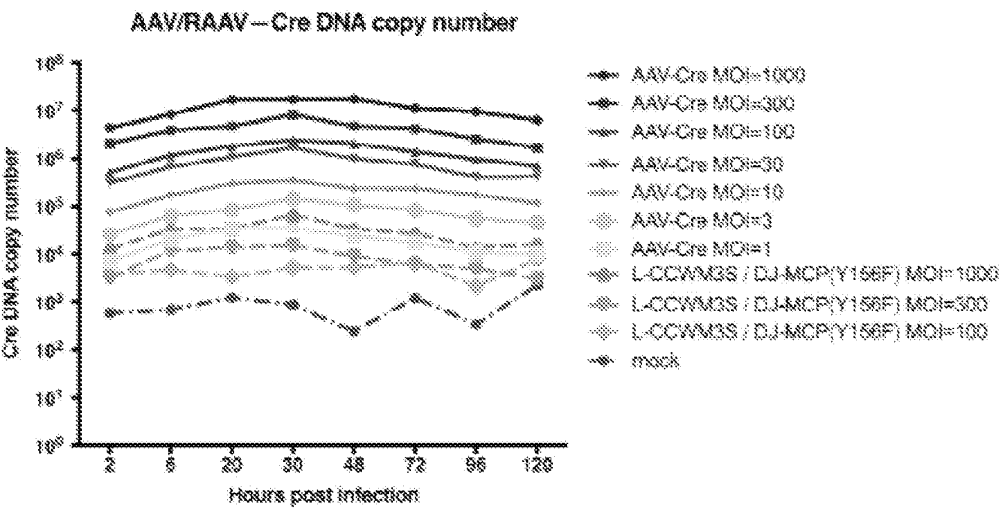


FIG. 14D

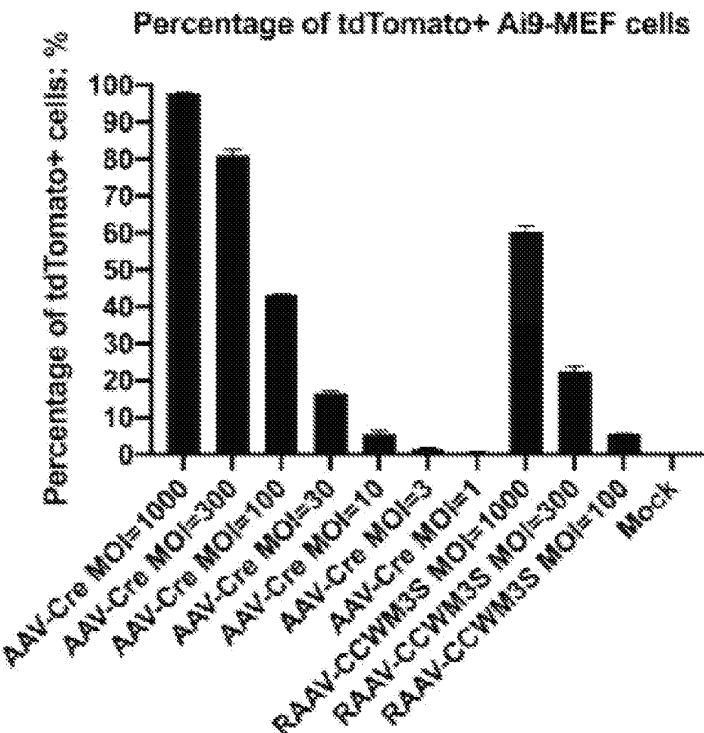


FIG. 15A

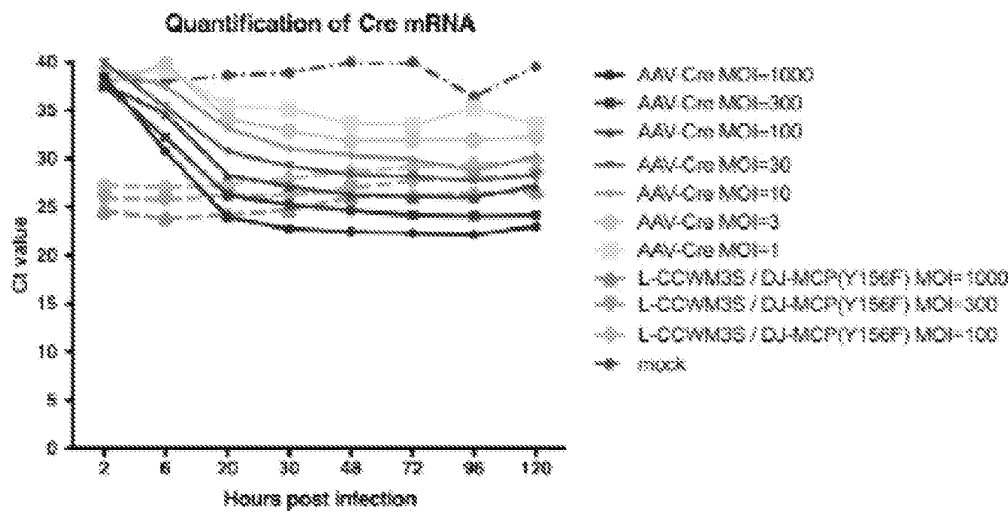


FIG. 15B

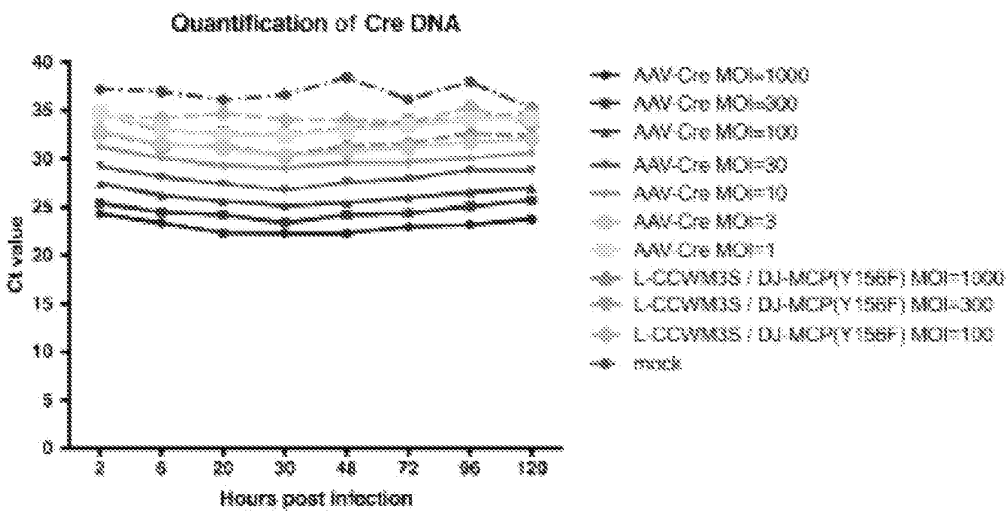


FIG. 15C

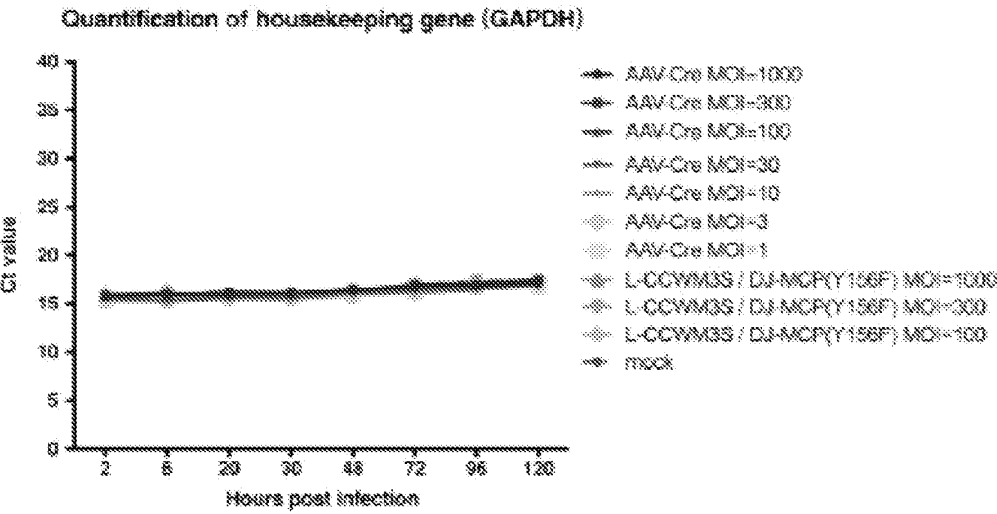


FIG. 15D

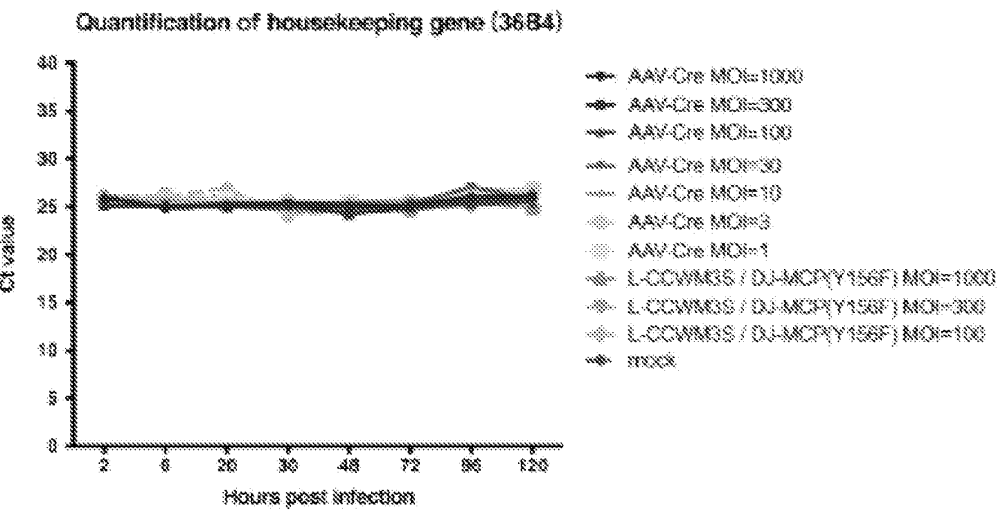


FIG. 16

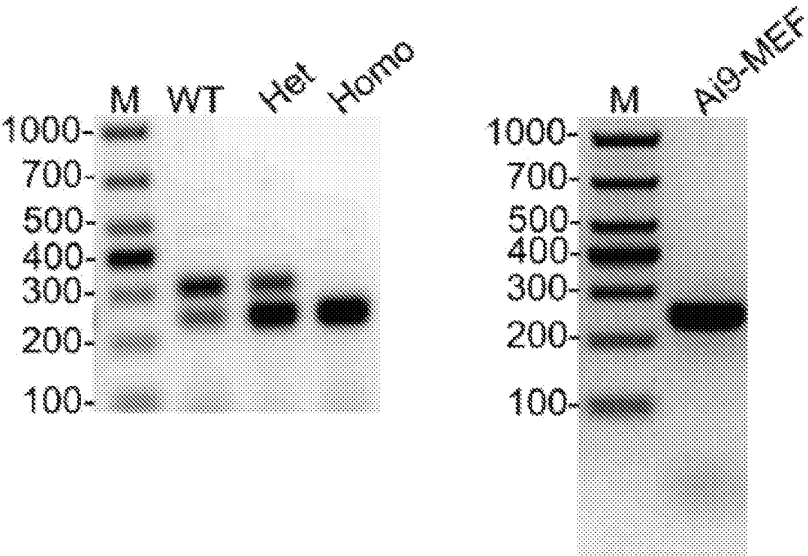


FIG. 17A

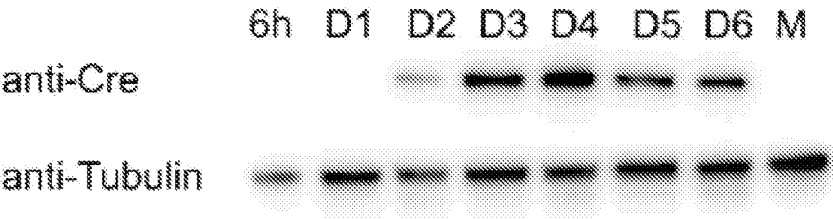


FIG. 17B

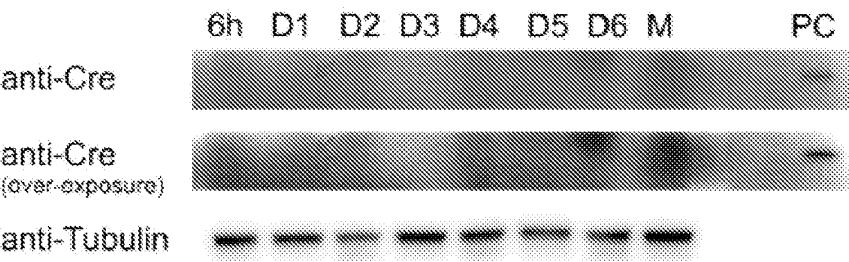


FIG. 18

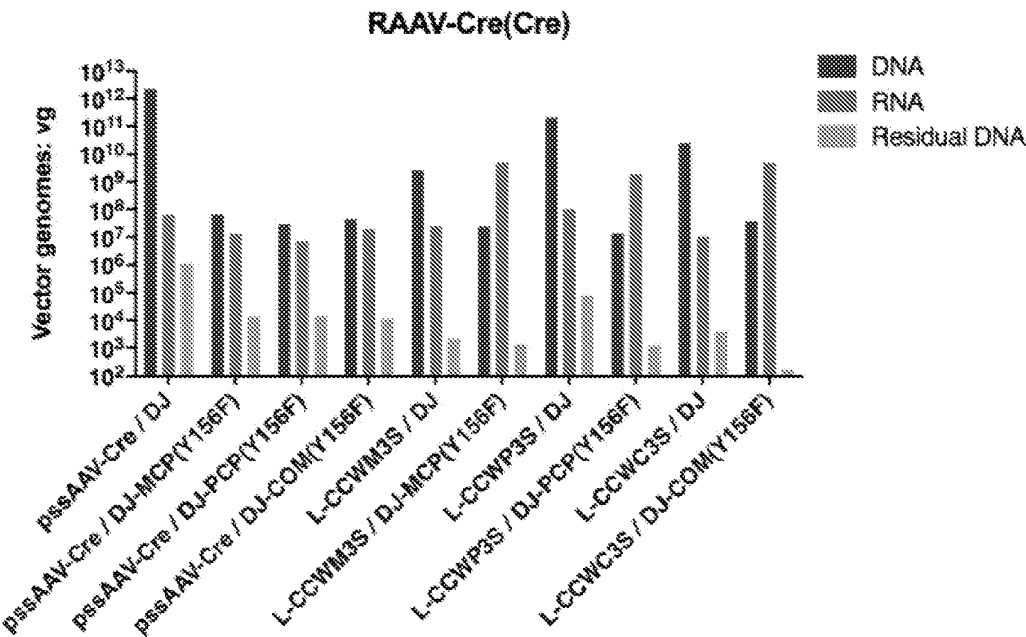


FIG. 19

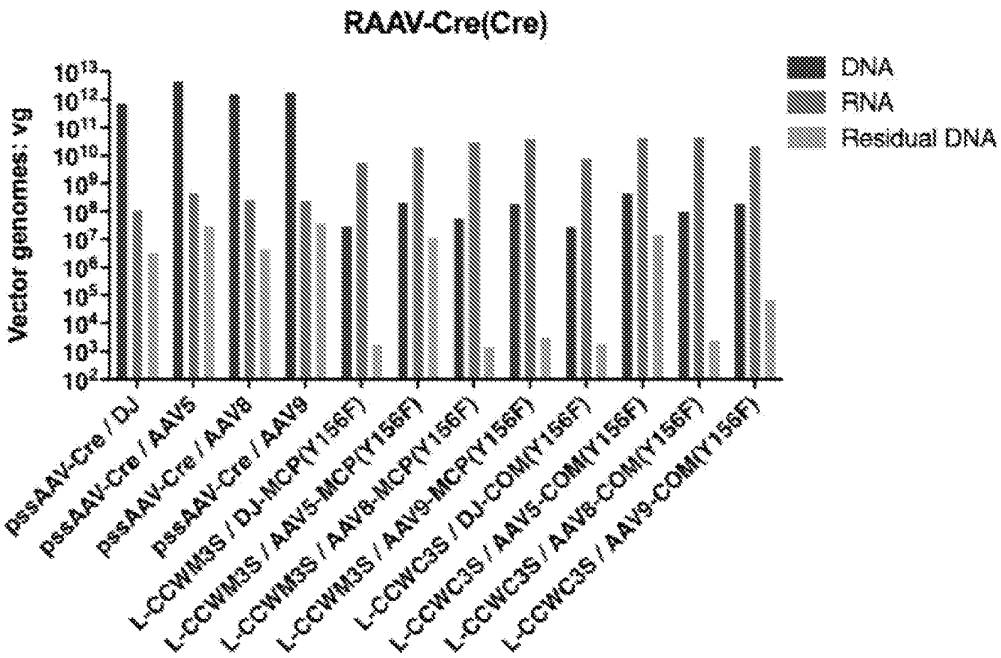


FIG. 20A
RAAV-Cre(Cre)

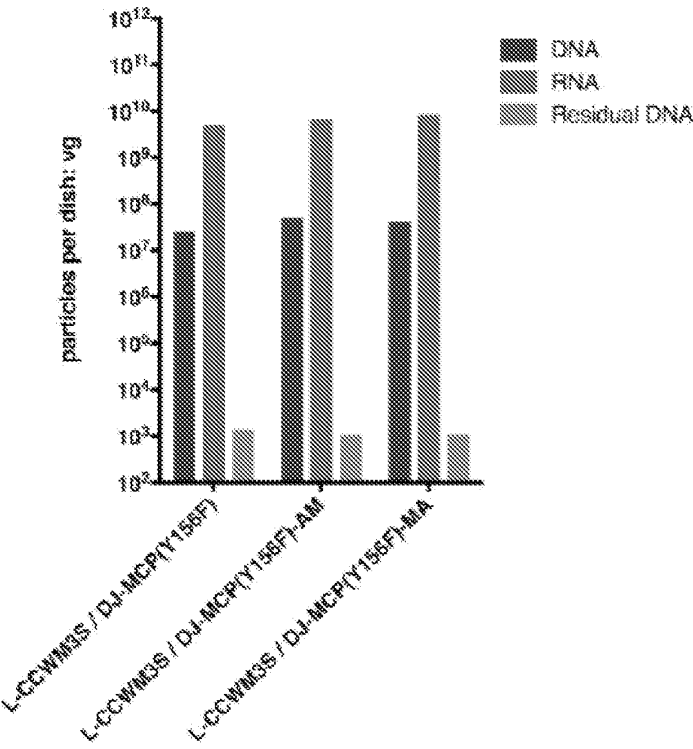


FIG. 20B

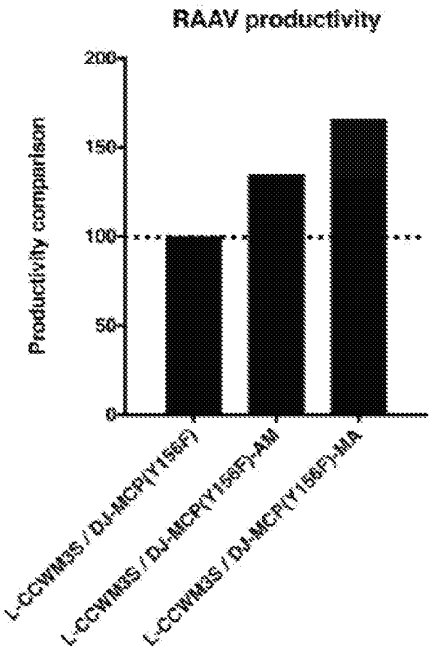


FIG. 21A

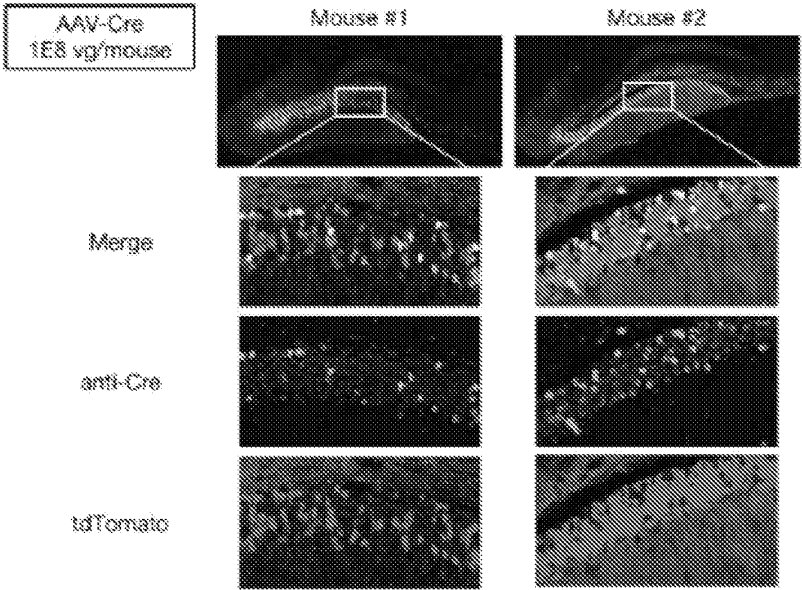


FIG. 21B

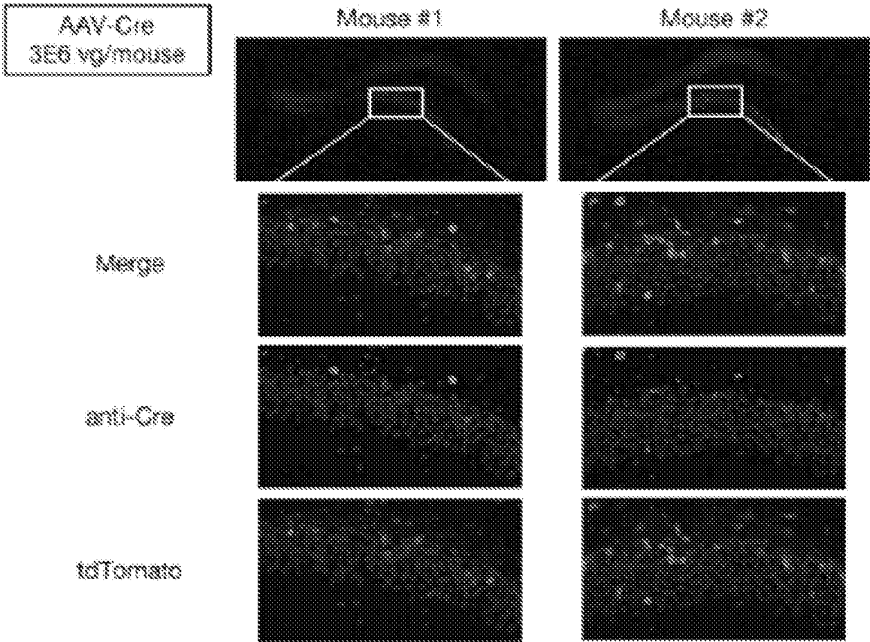


FIG. 21C

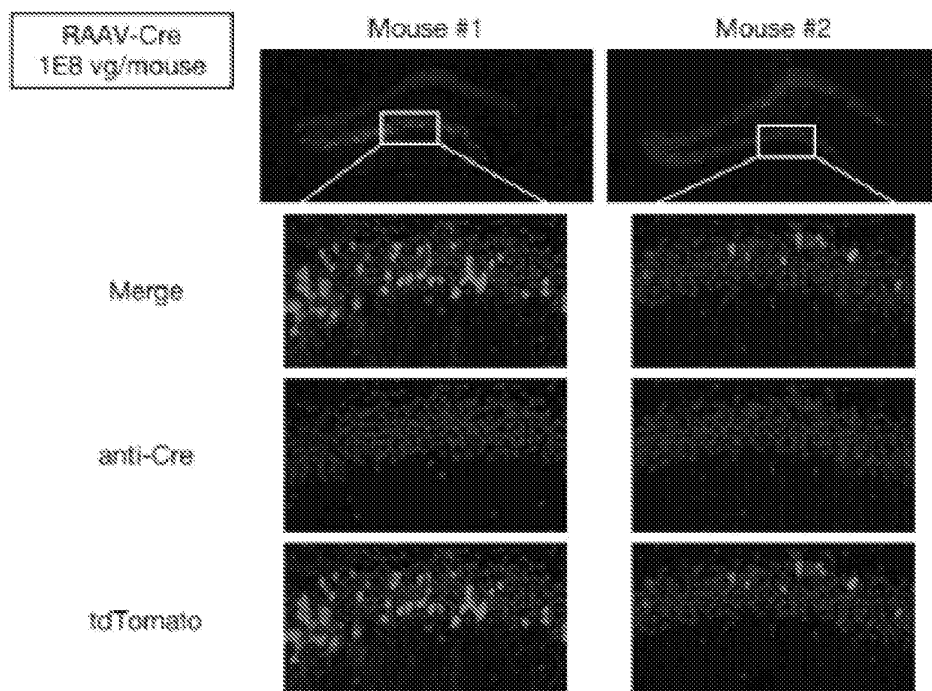


FIG. 21D

