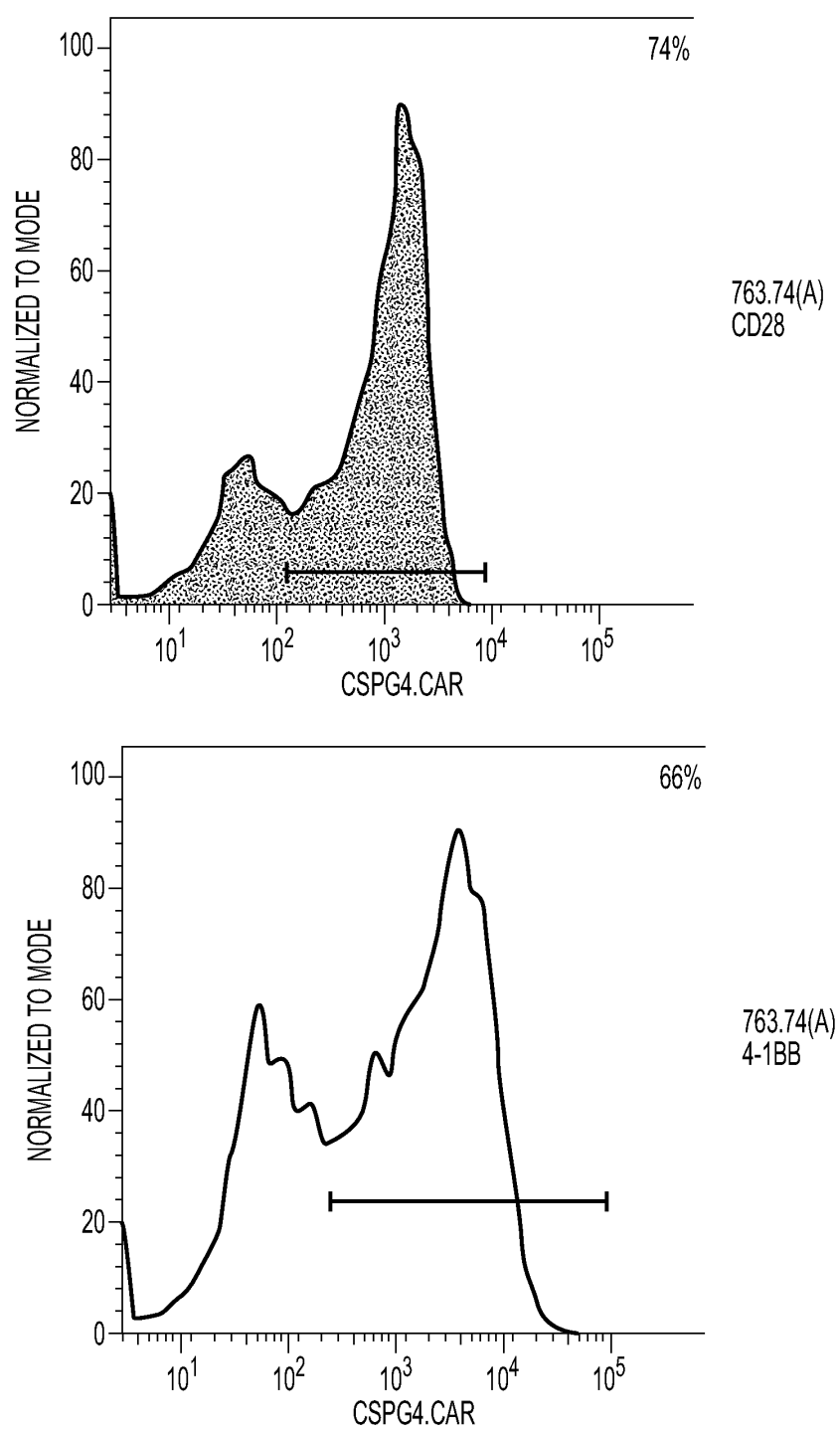


**FIG. 1A**

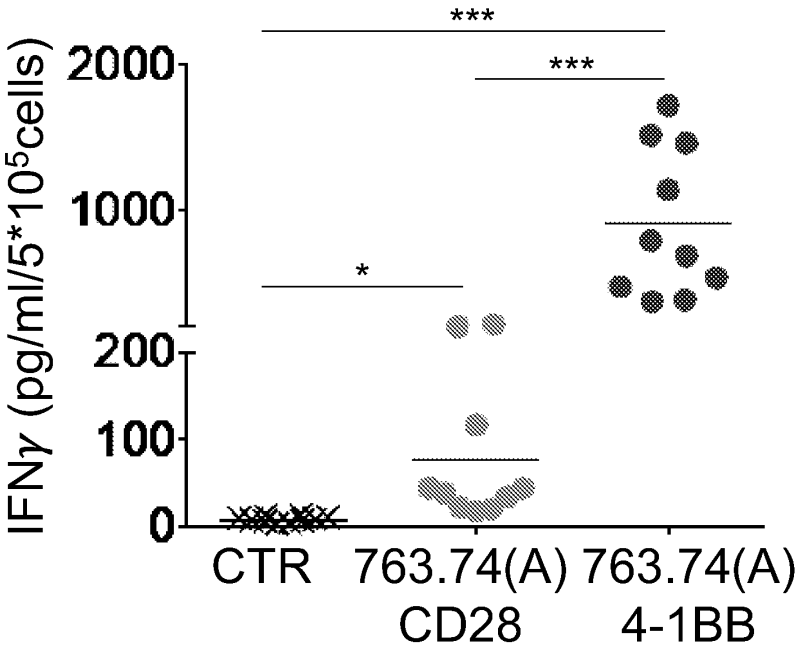


FIG. 1B

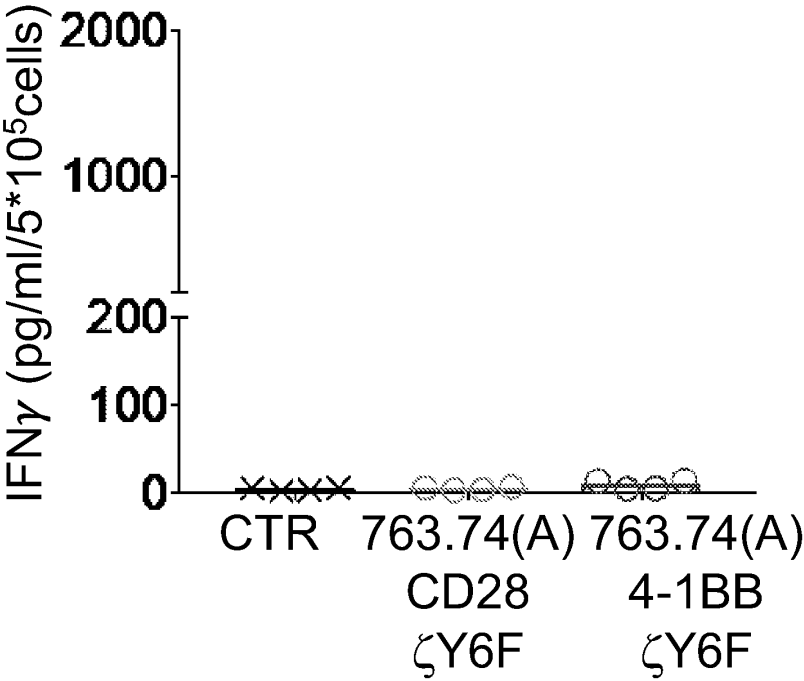
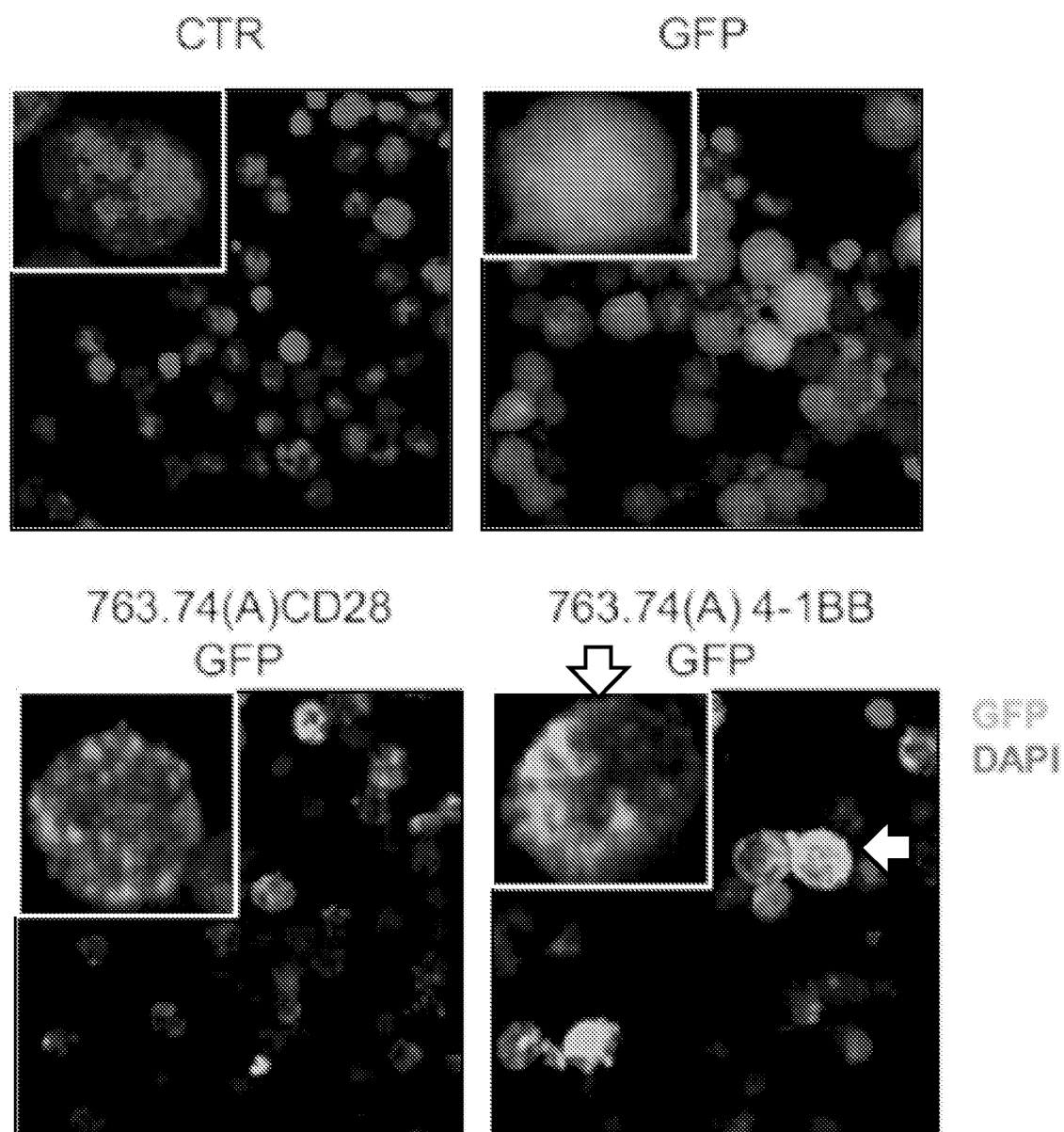
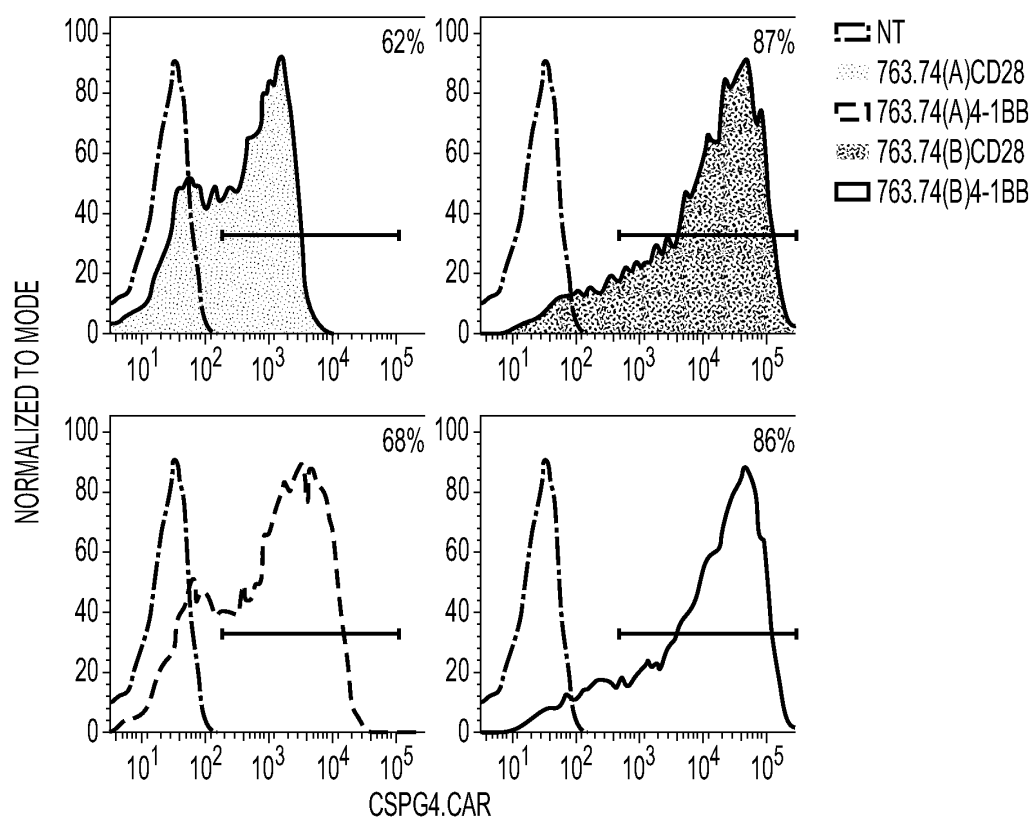


FIG. 1C

**FIG. 1D**

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763.74(A)V_L DRLSSQSFSLSVTPGETVSLSCRASQTIYKNLHWYQQKSHRSPRLLIKYGSDSIS
 763.74(B)V_L DRLSSQSFSLSVTPGETVSLSCRASQTIYKNLHWYQQKSHRSPRLLIKYGSDSIS
 FR1 CDR1 FR2 CDR2
 763.74(A)V_H GIPSRFTGSGSGTDYTLNINSVKPEDGIYYCLQGYSTPWTFGGGKLEIK
 763.74(B)V_H GIPSRFTGSGSGTDYTLNINSVKPEDGIYYCLQGYSTPWTFGGGKLEIK
 FR3 CDR3 FR4
 763.74(A)V_H QVRLKESGPELKKPGETVKISKASGYTFDYSMHVVKKTPGKGLKWLGWINTATGEP
 763.74(B)V_H QVRLKESGPELKKPGETVKISKASGYTFDYSMHVVKKTPGKGLKWLGWINTATGEP
 FR1 CDR1 FR2 CDR2
 763.74(A)V_H TYADDFKGRFAISLETSARTVYQINNLRNEDTATYFCFSYYDYWGQGTITVSS
 763.74(B)V_H TYADDFKGRFAISLETSARTVYQINNLRNEDTATYFCFSYYDYWGQGTITVSS
 CDR2 FR3 CDR3 FR4

FIG. 2A**FIG. 2B**

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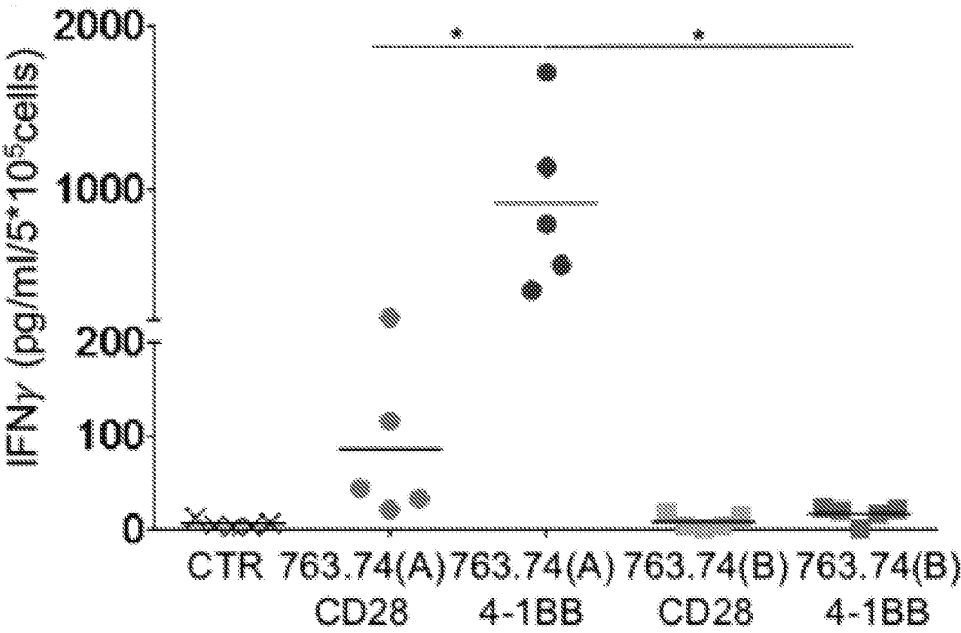


FIG. 2C

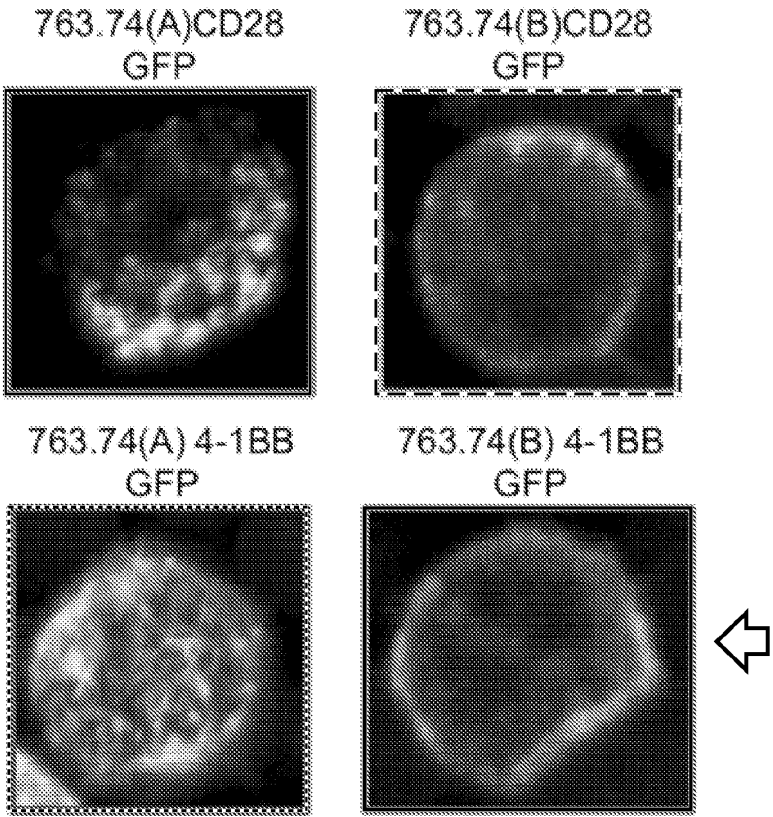


FIG. 2D

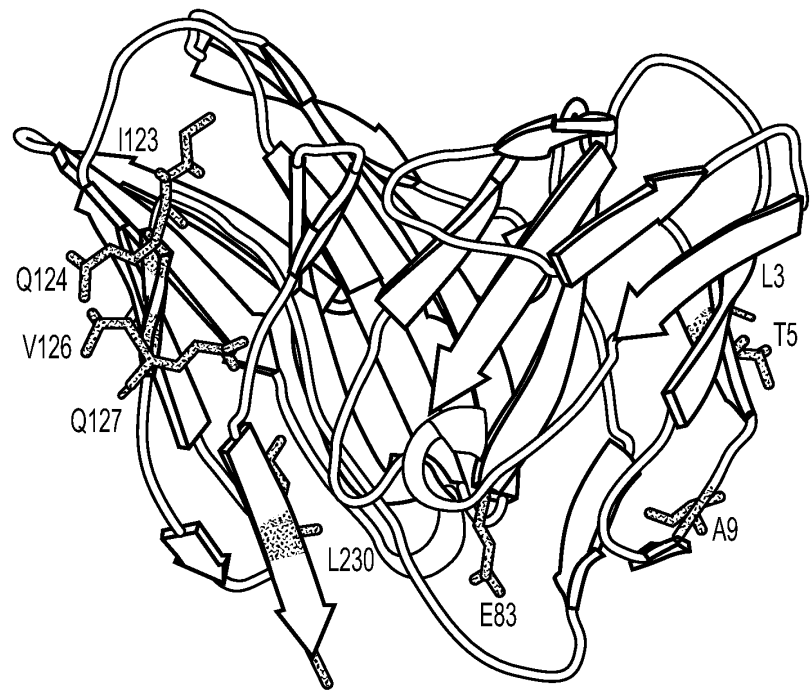


FIG. 3A

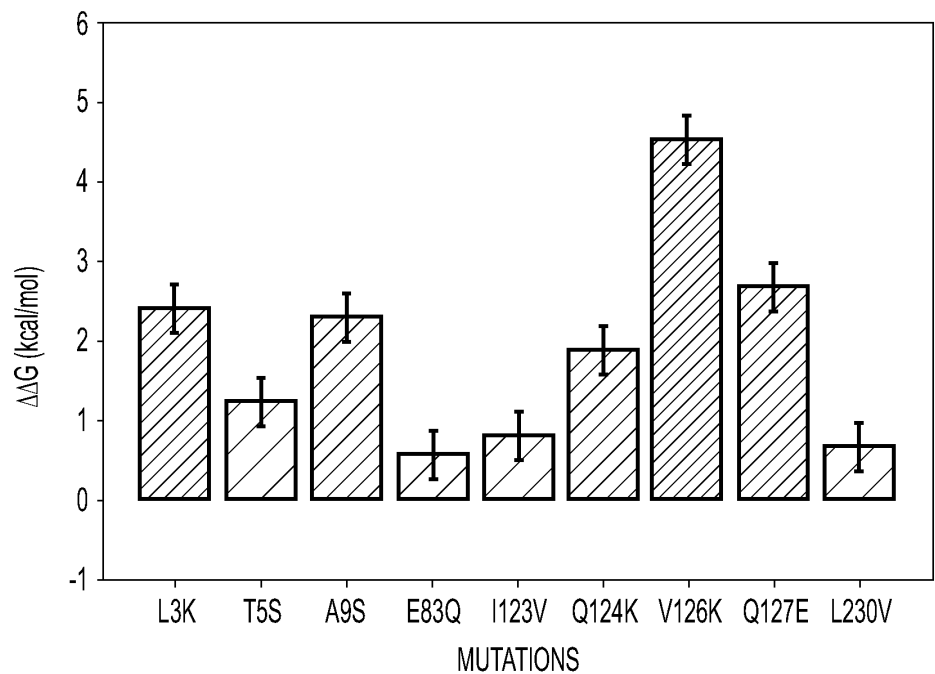


FIG. 3B

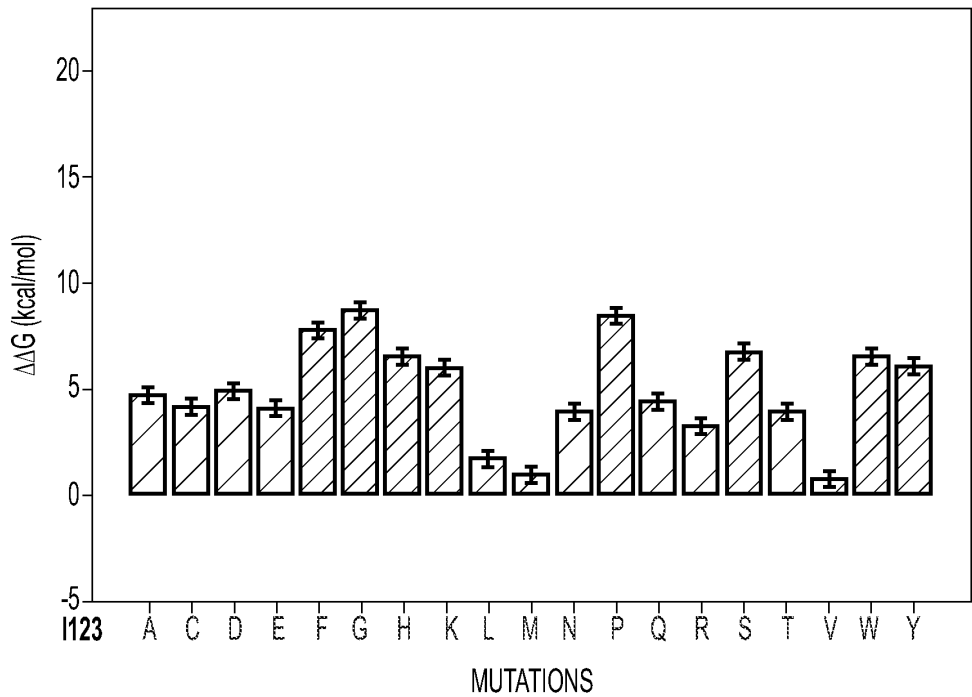


FIG. 3C

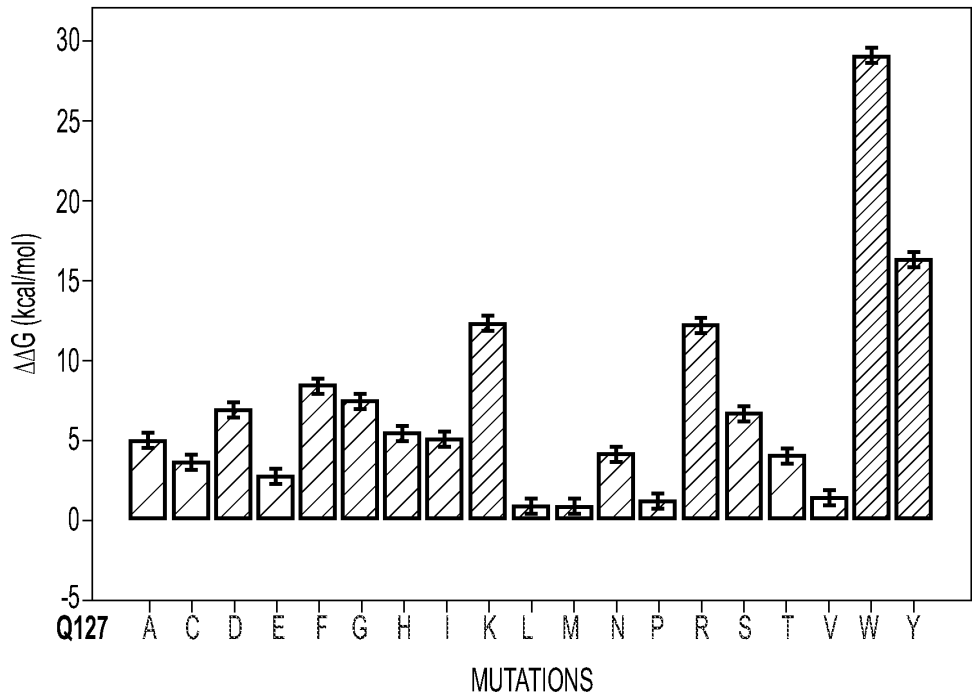


FIG. 3D

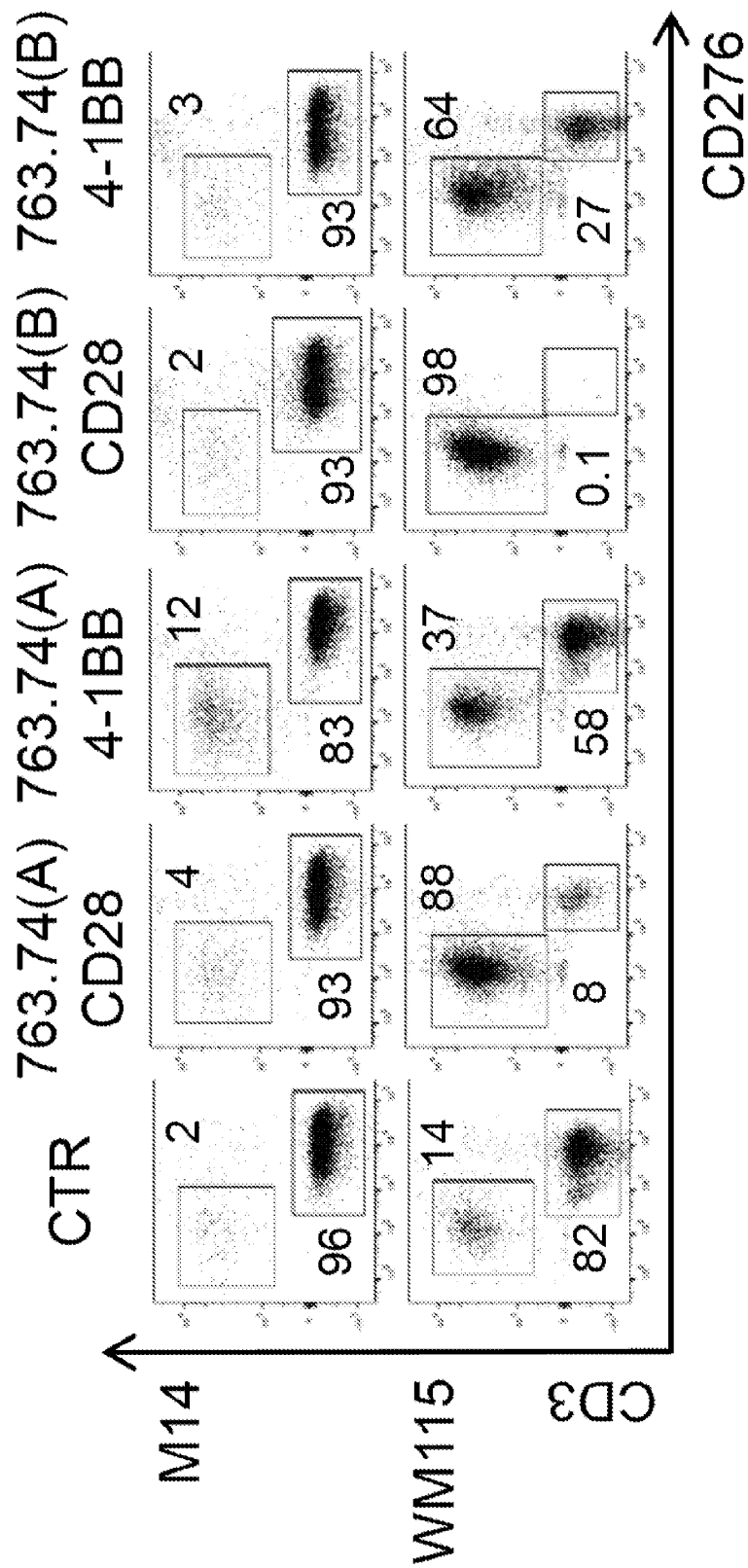


FIG. 4A

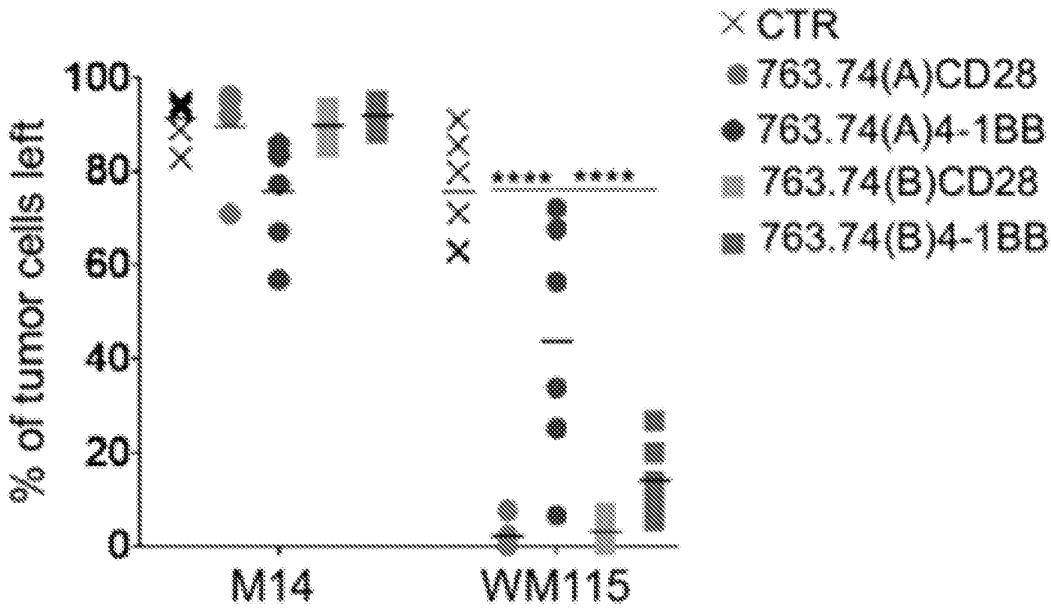


FIG. 4B

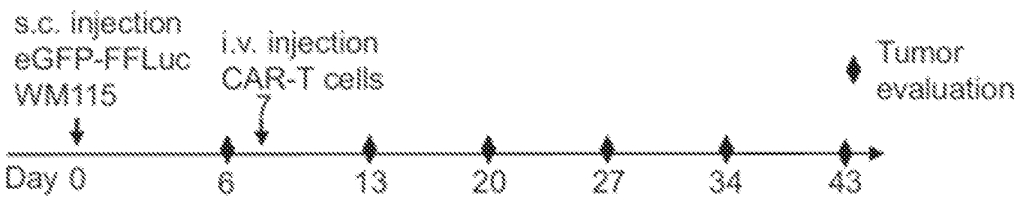


FIG. 4C

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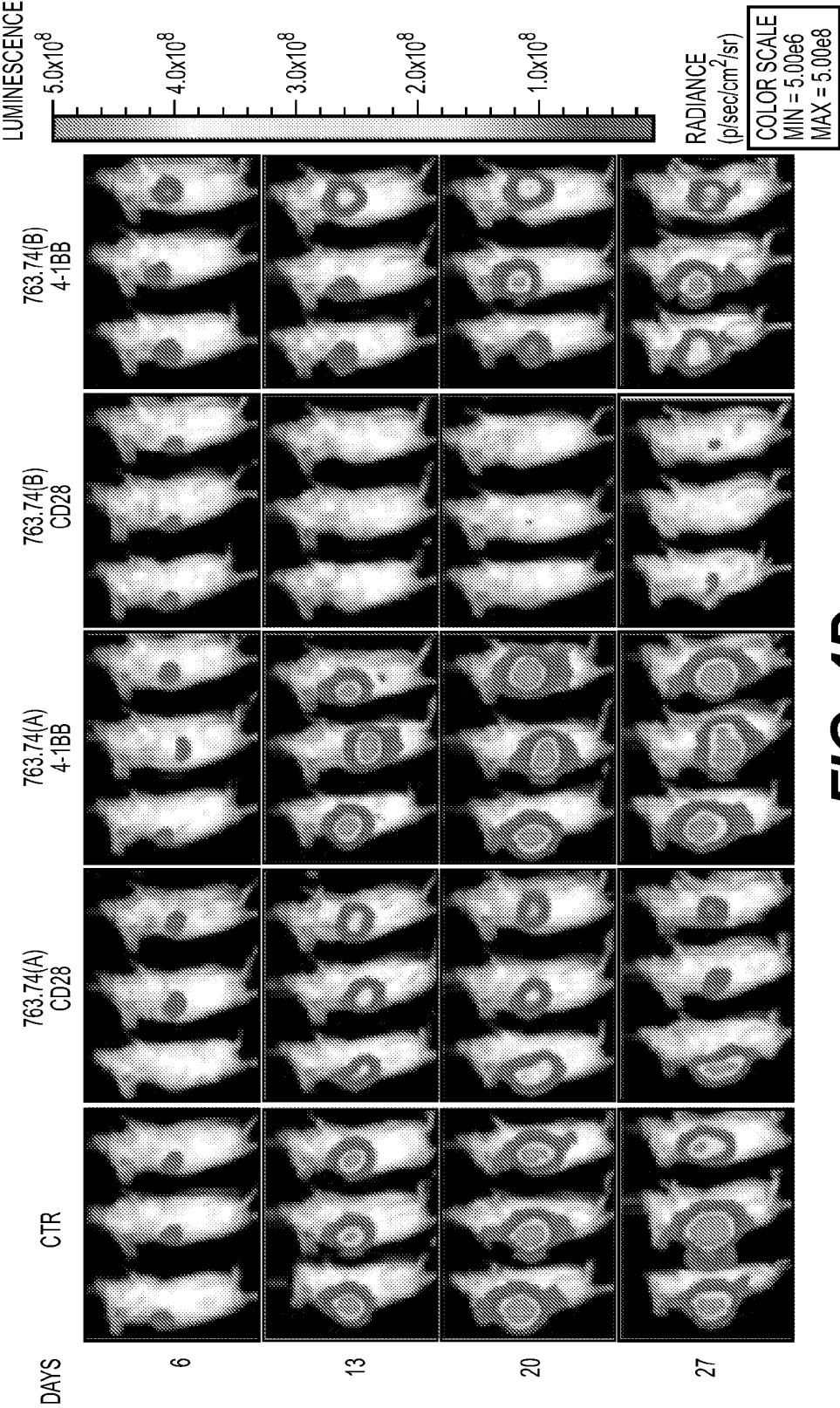


FIG. 4D

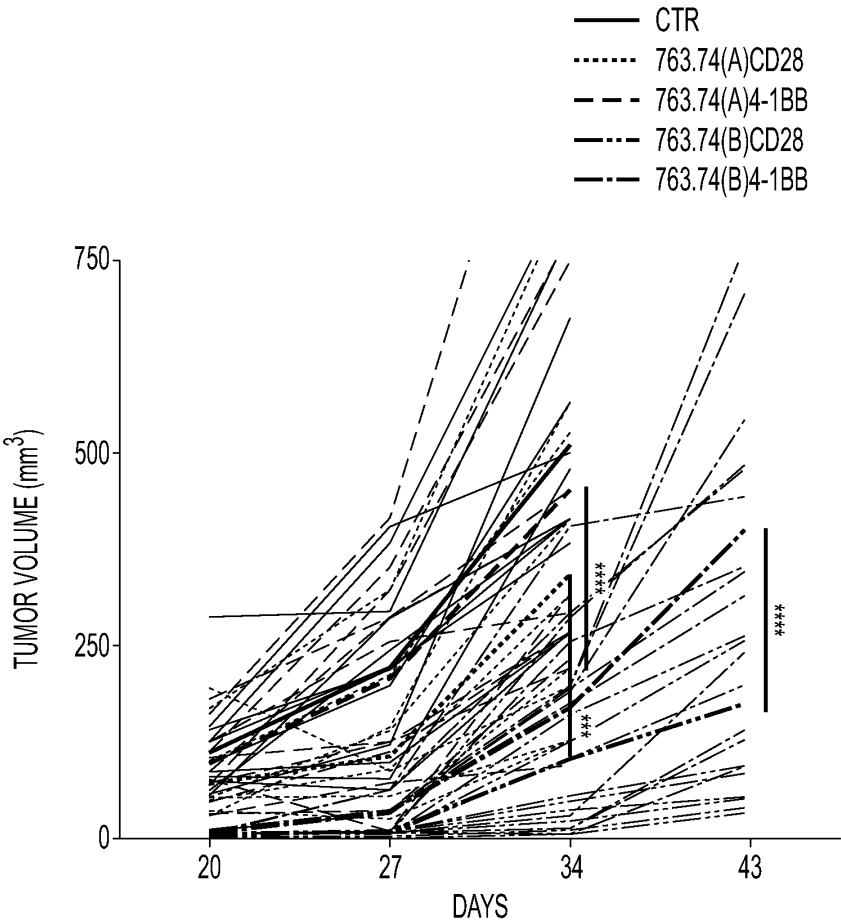


FIG. 4E

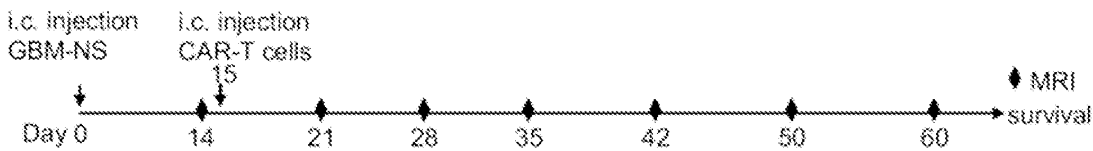
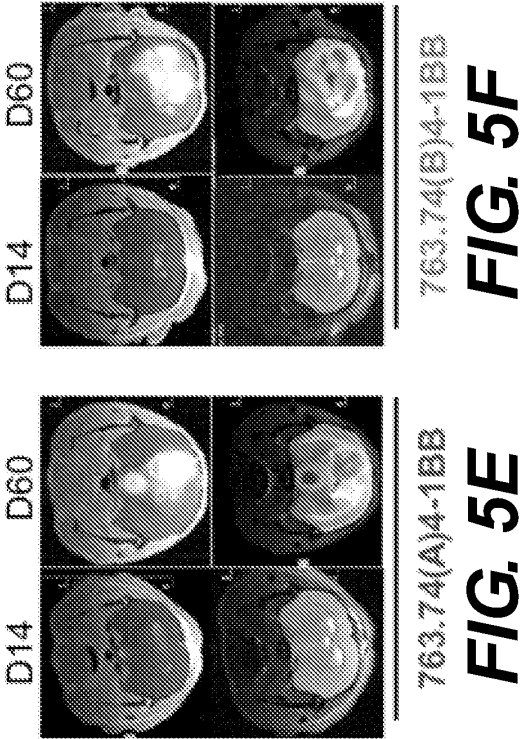
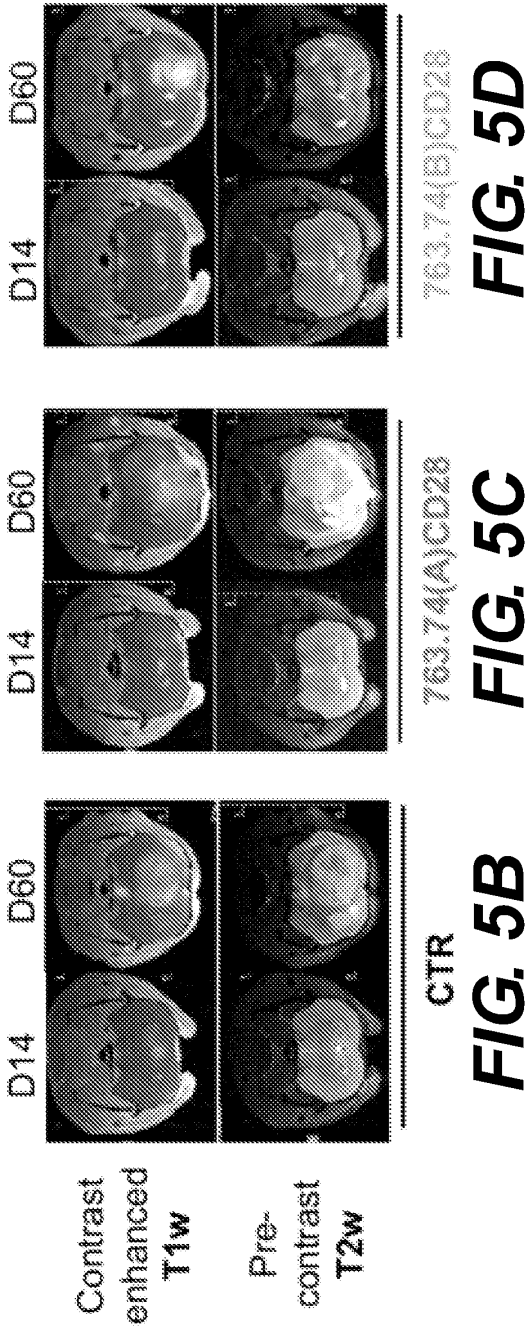


FIG. 5A



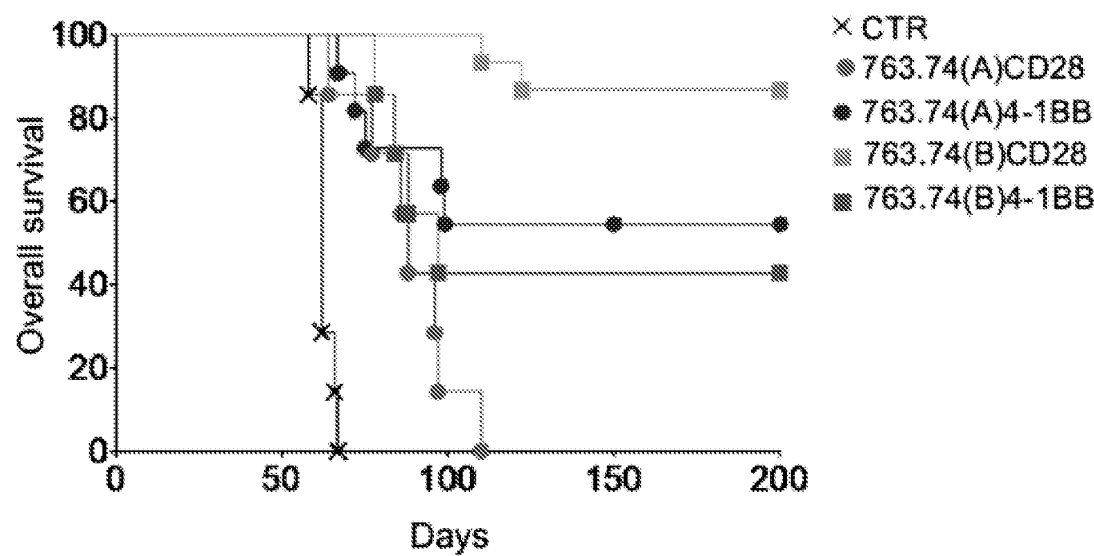


FIG. 5G

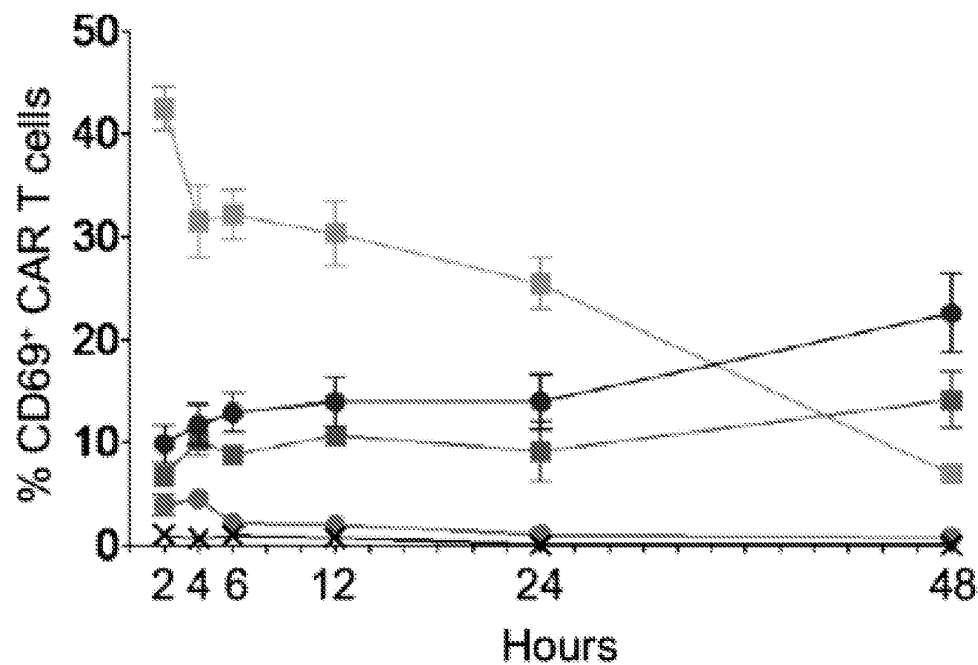


FIG. 5H

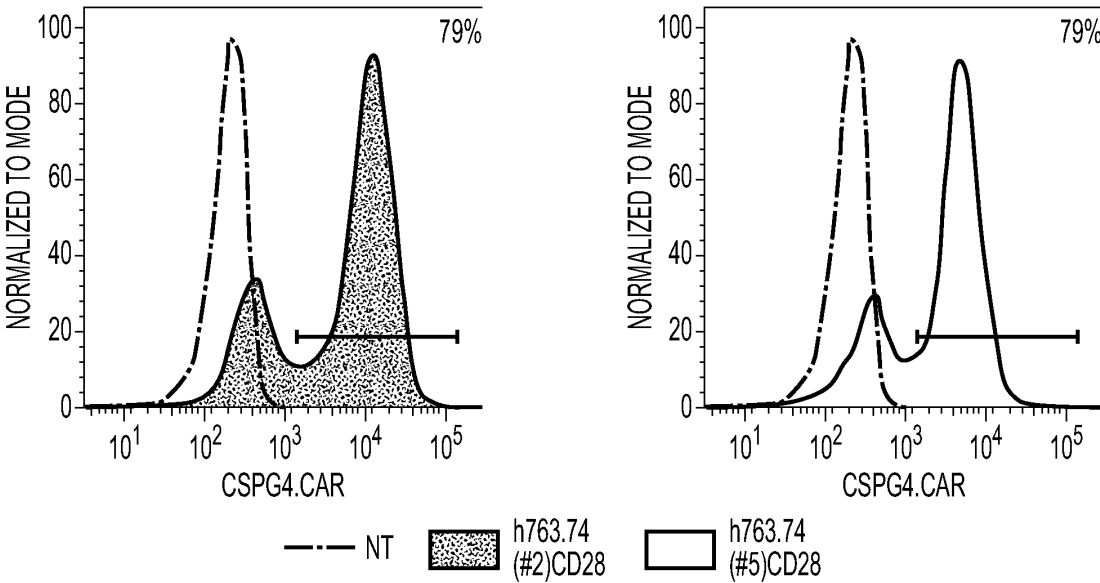


FIG. 6A

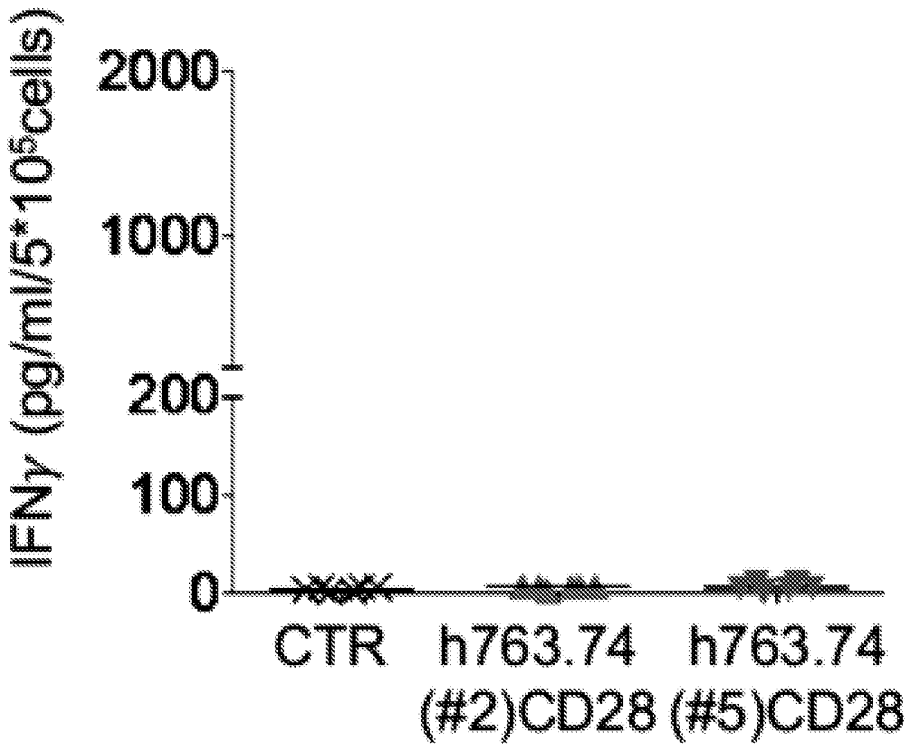
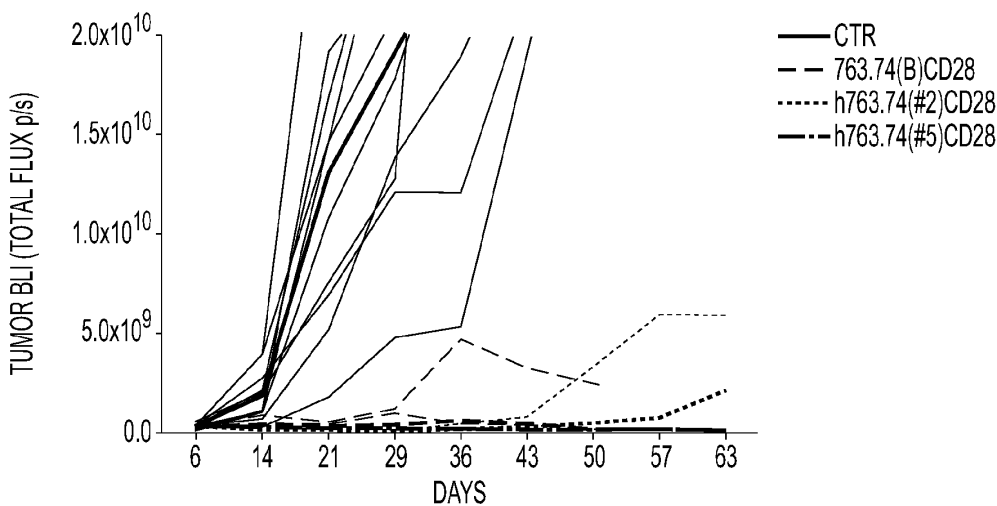
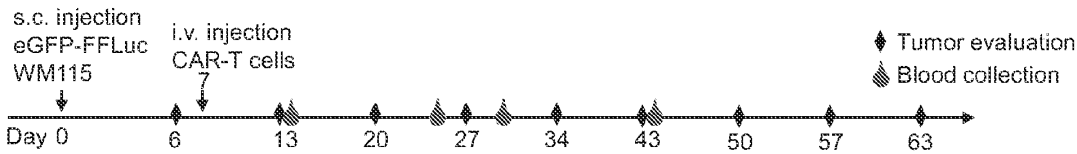
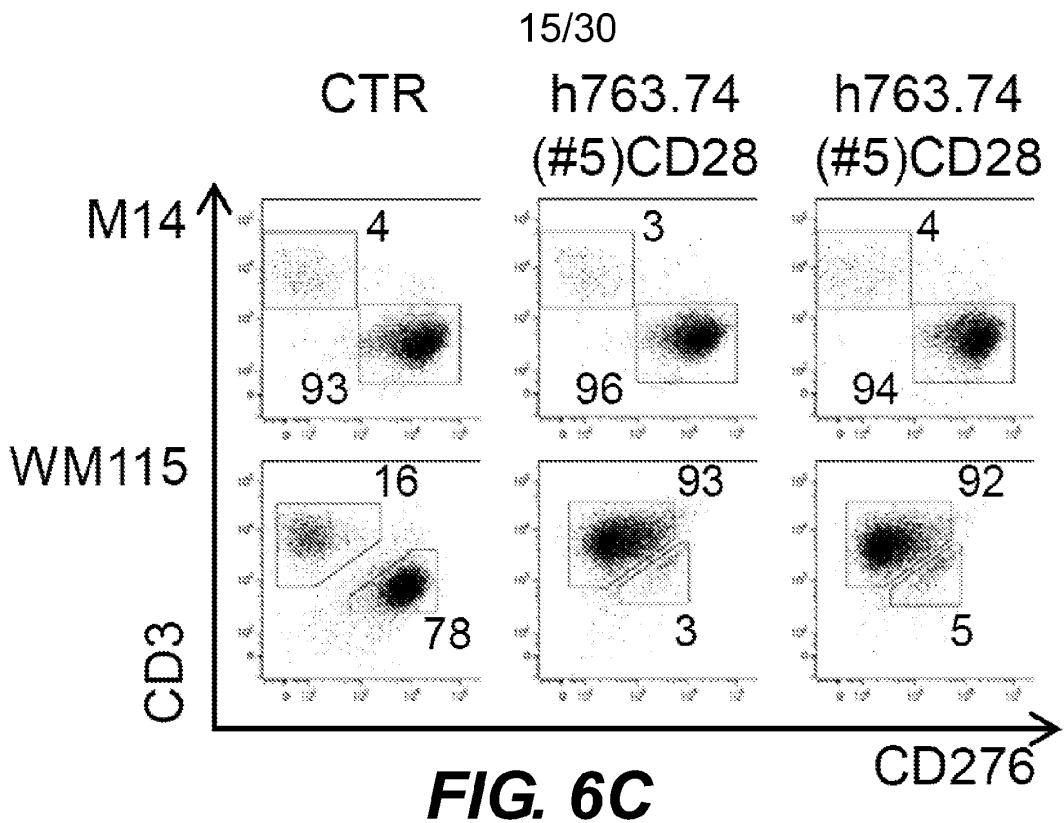


FIG. 6B



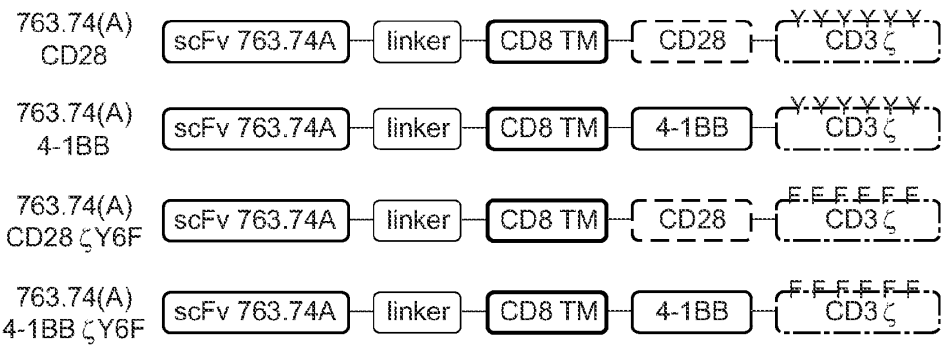
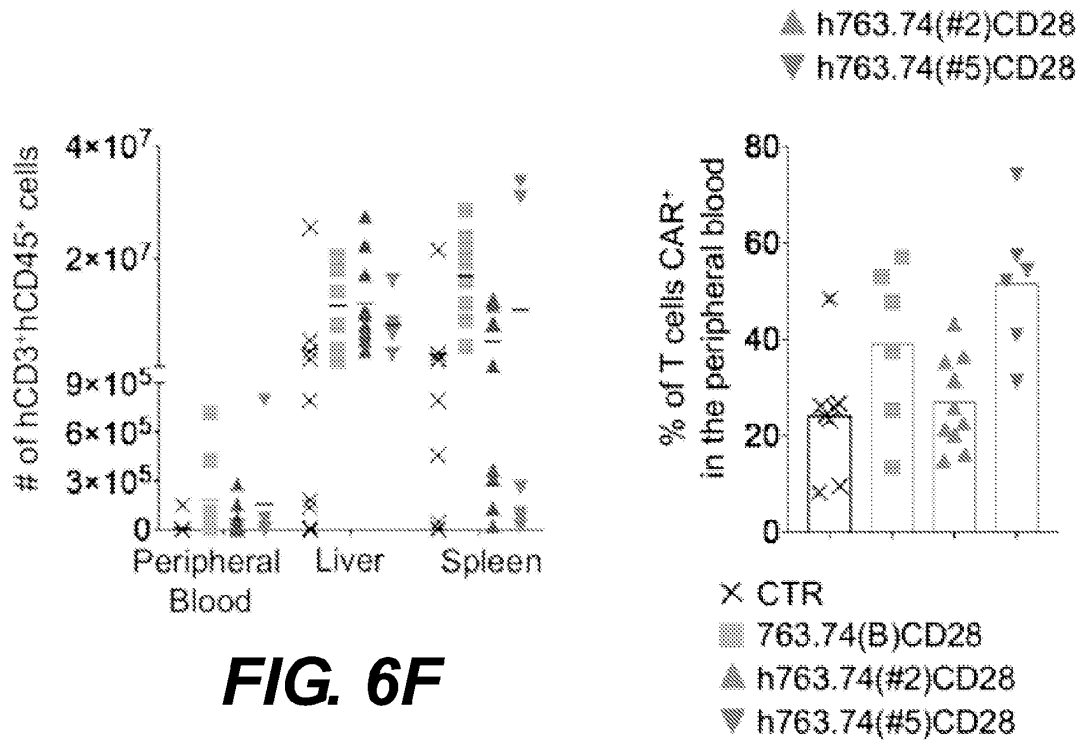


FIG. 7A

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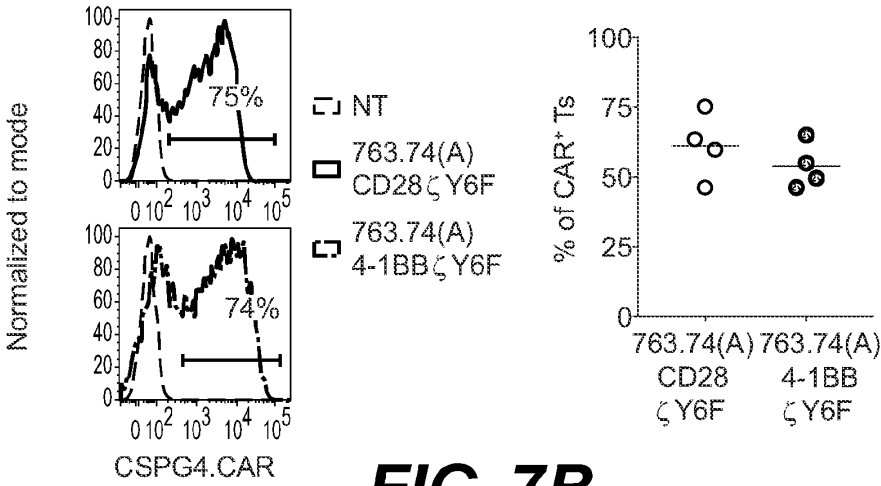


FIG. 7B

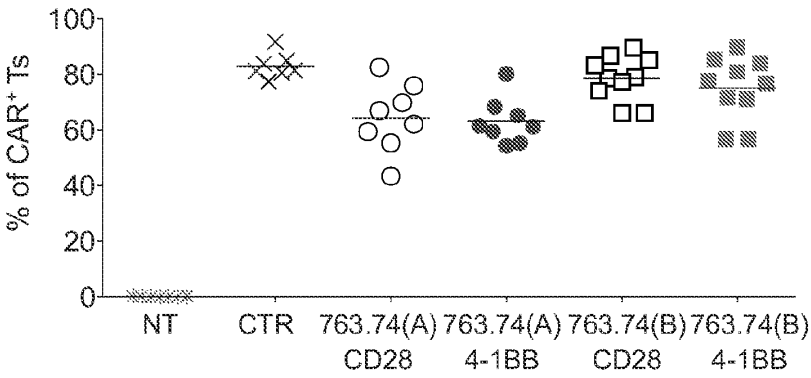


FIG. 8A

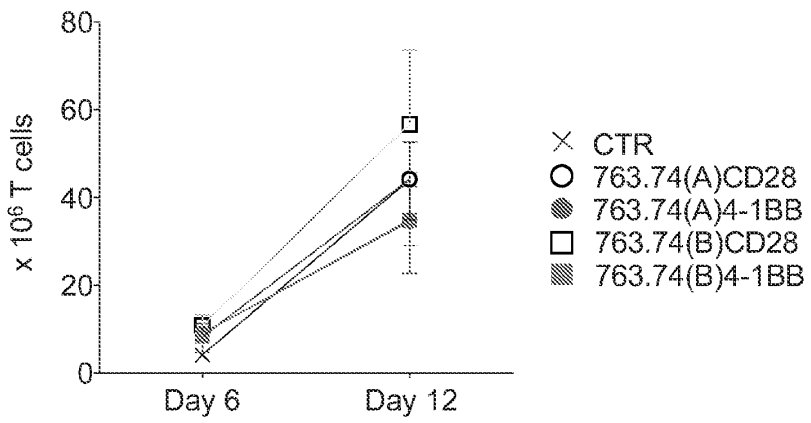


FIG. 8B

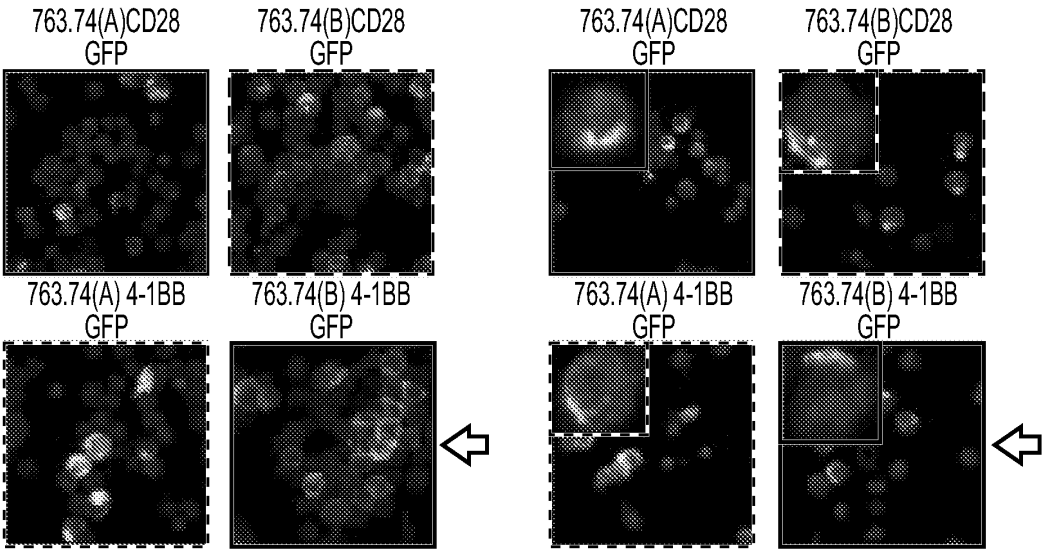


FIG. 8C

FIG. 8D

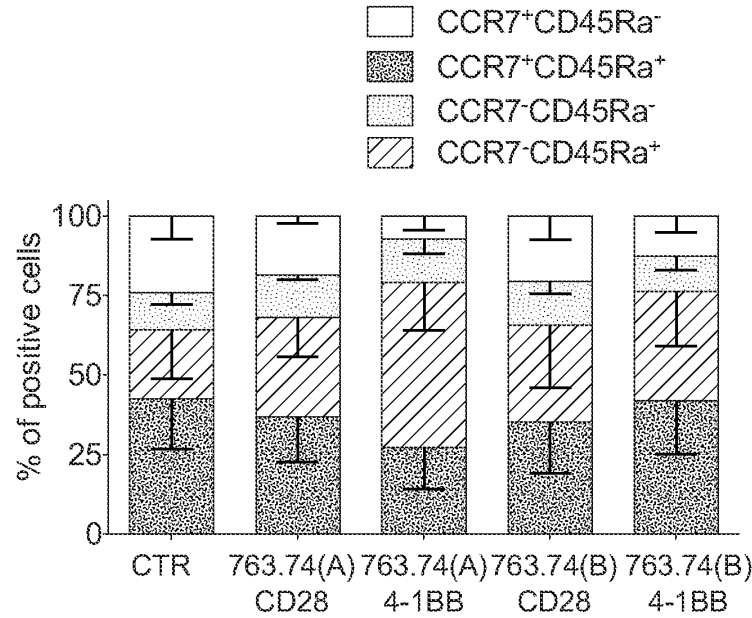
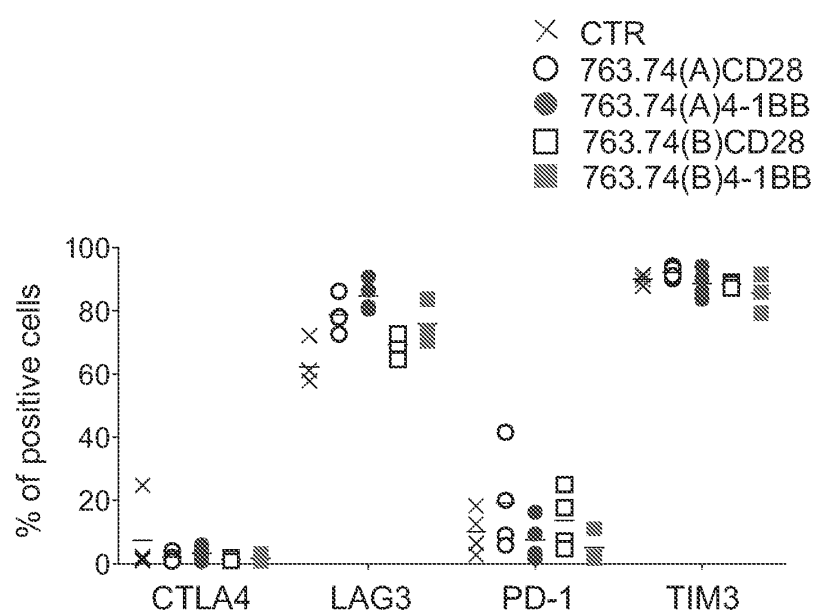


FIG. 8E

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**FIG. 8F**

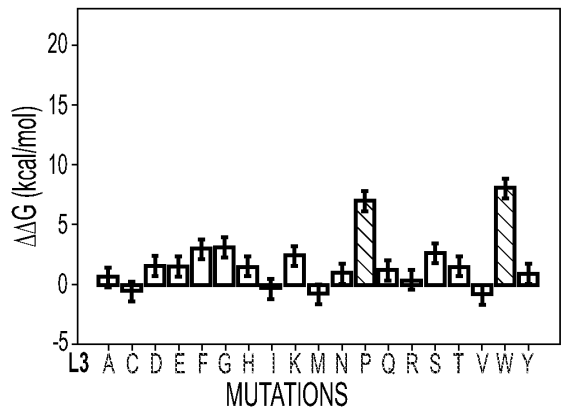


FIG. 9A

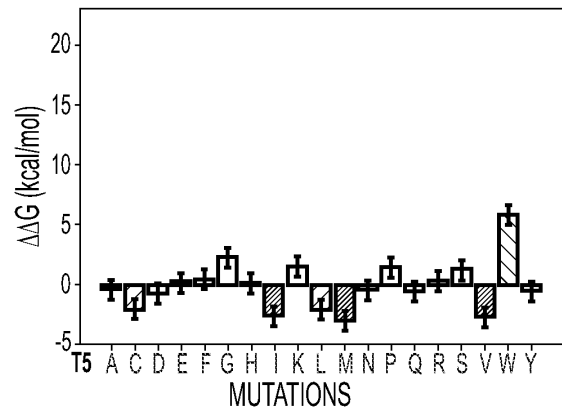


FIG. 9B

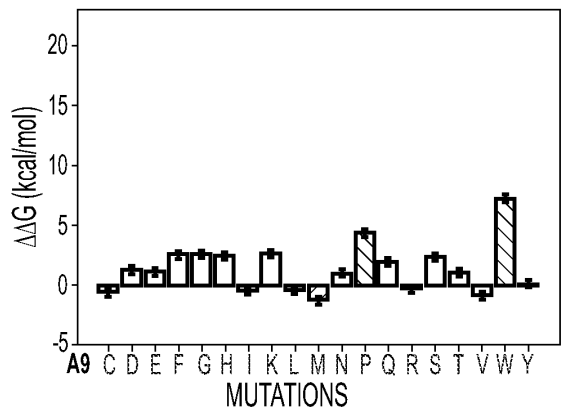


FIG. 9C

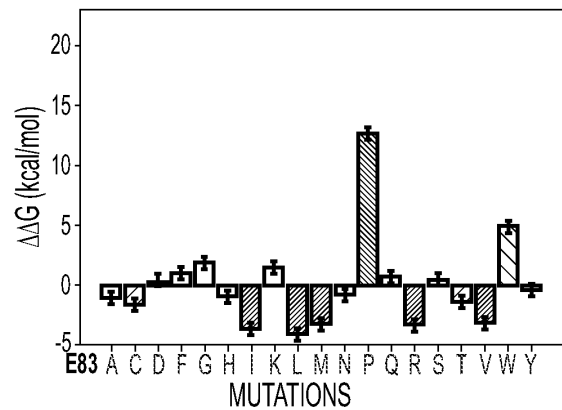


FIG. 9D



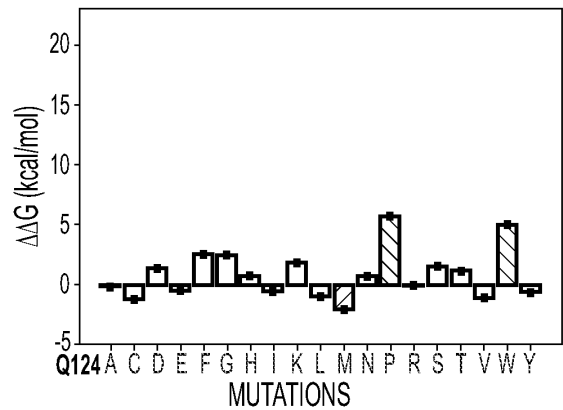


FIG. 9E

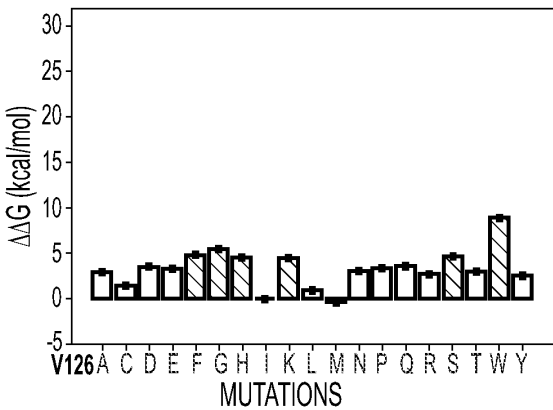


FIG. 9F

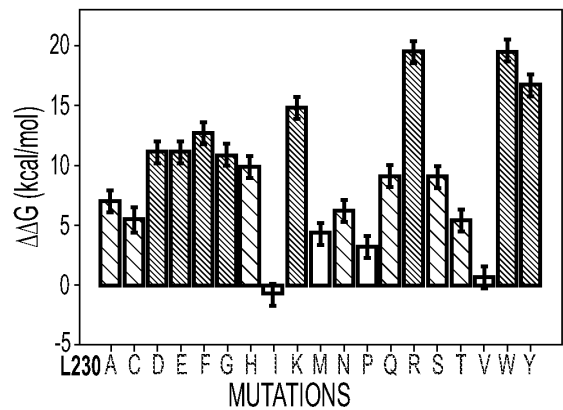
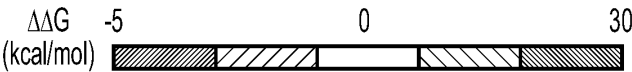


FIG. 9G



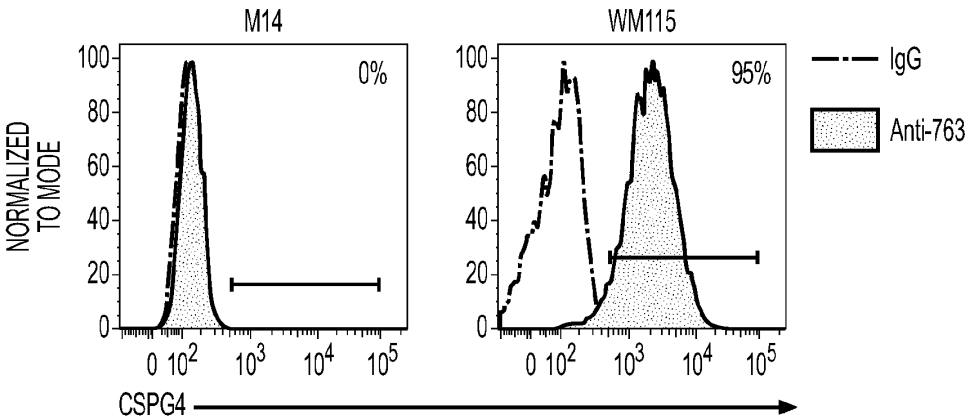


FIG. 10A

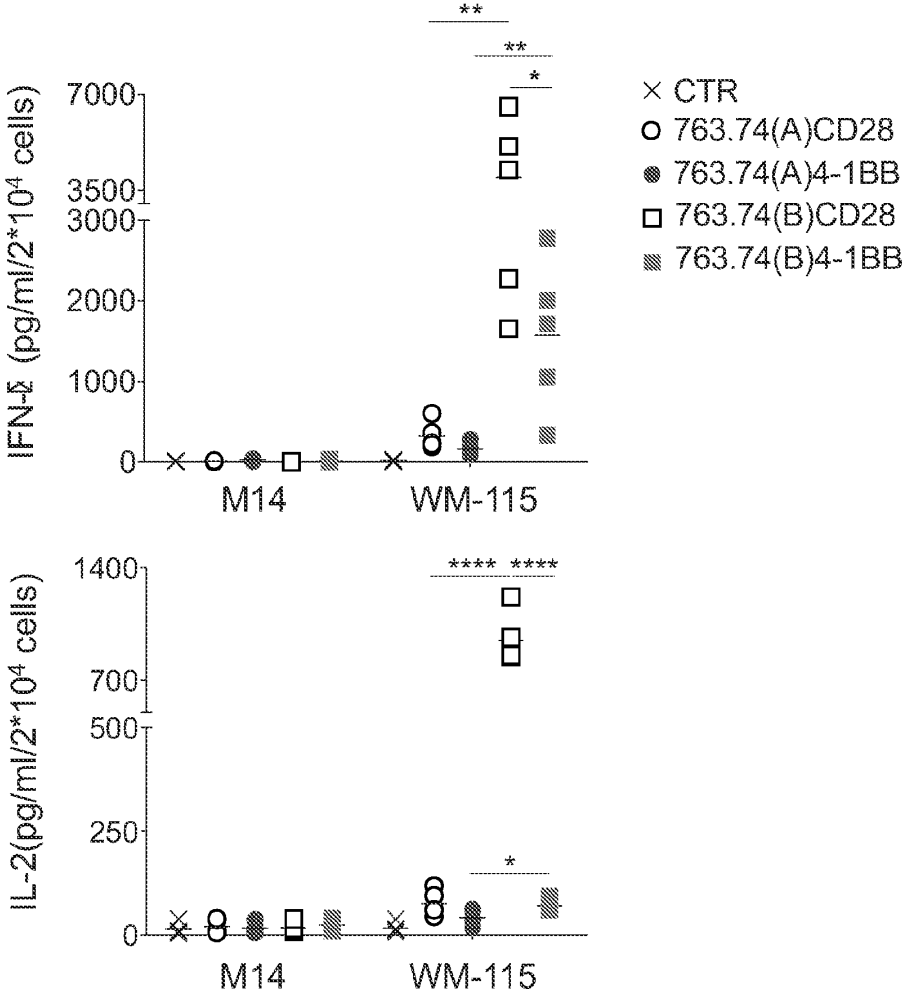
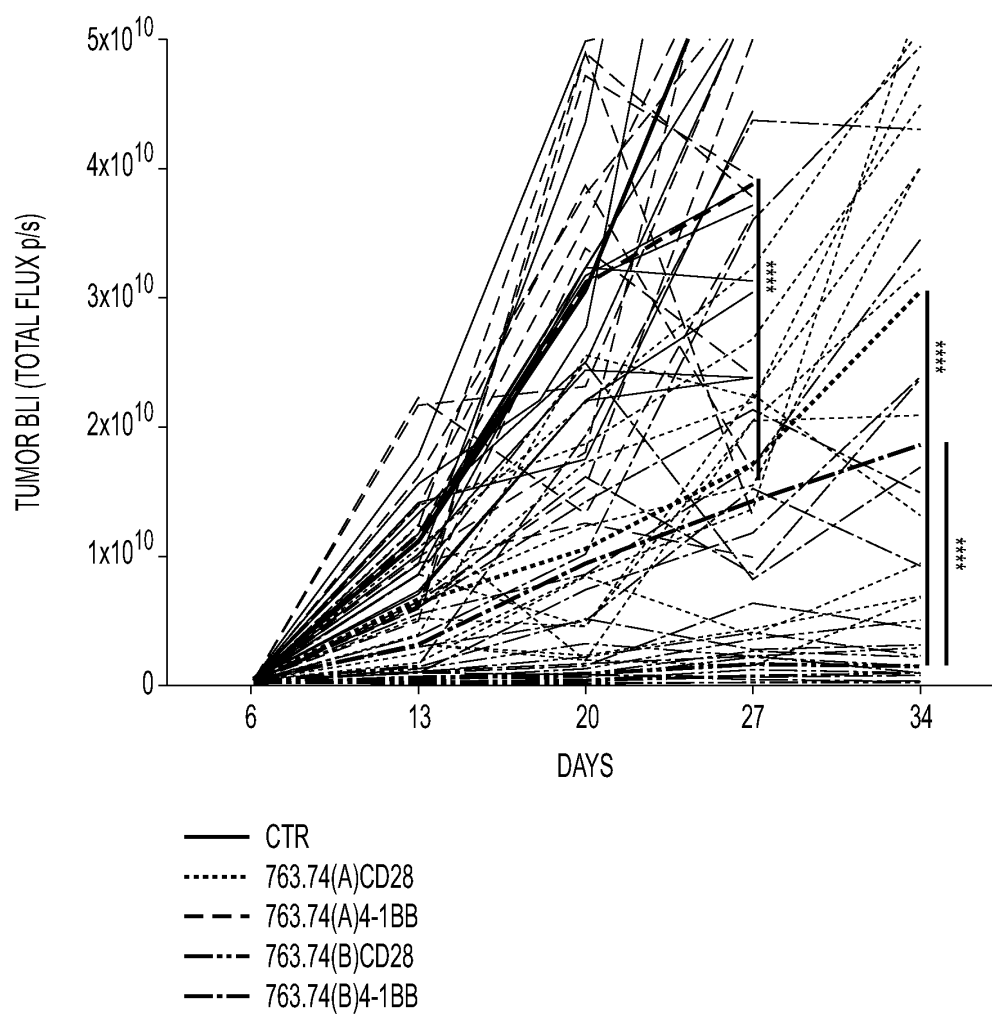
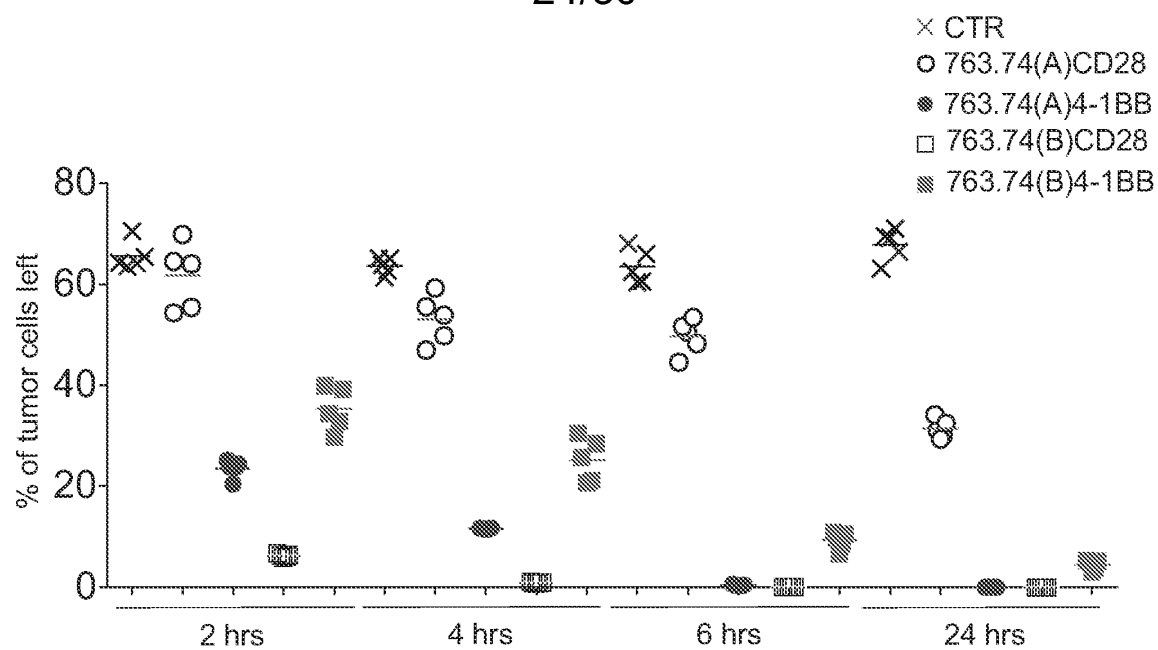
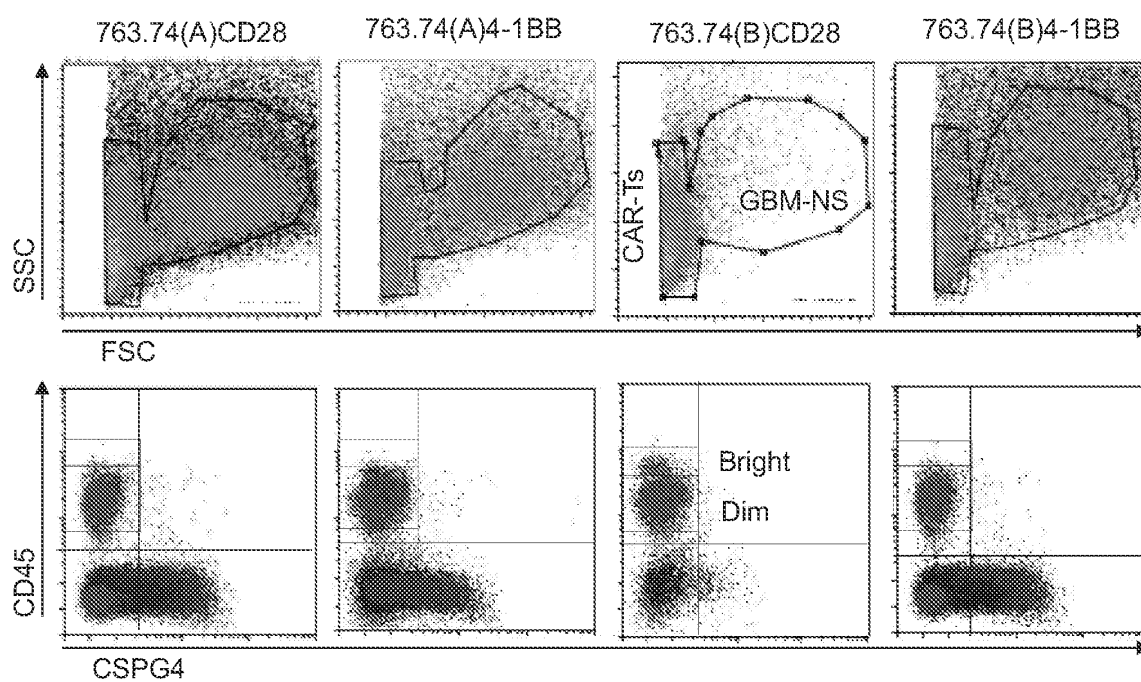
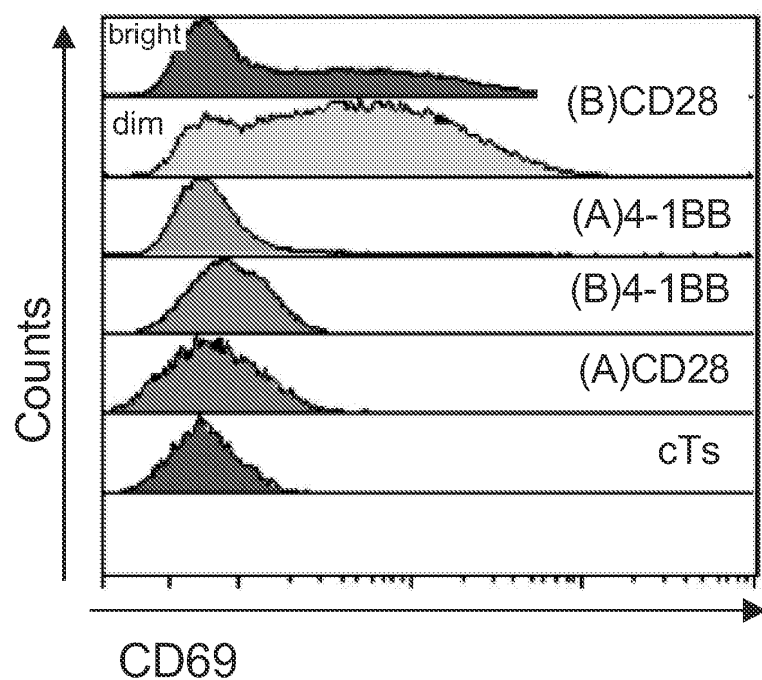
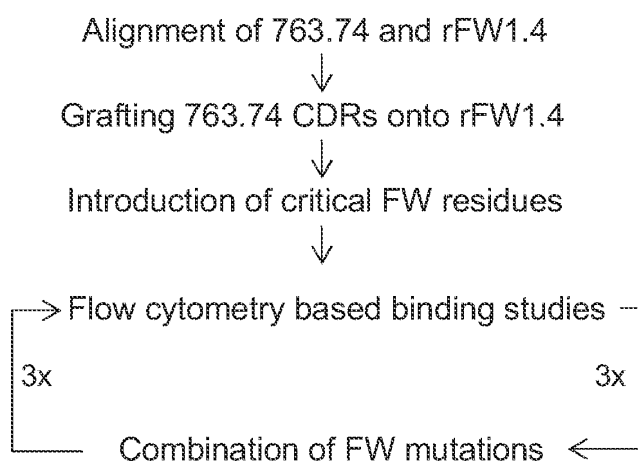


FIG. 10B

**FIG. 10C**

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**FIG. 11A****FIG. 11B**

**FIG. 11C****FIG. 12A**

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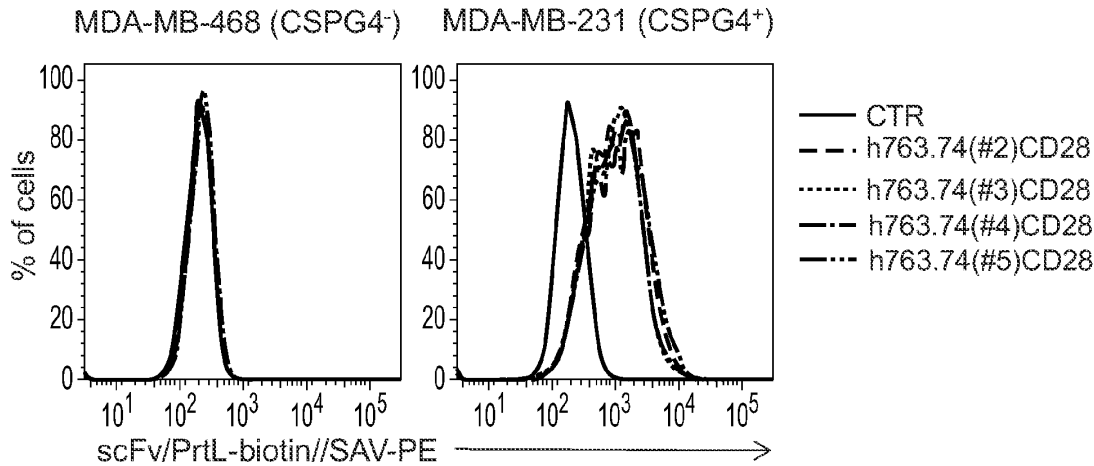


FIG. 12B

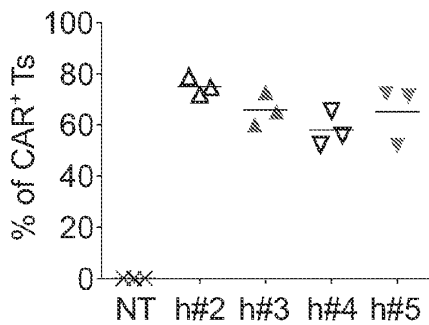


FIG. 12C

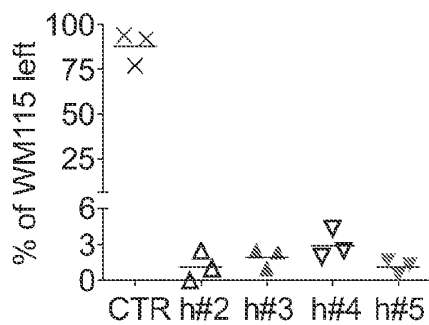


FIG. 12D

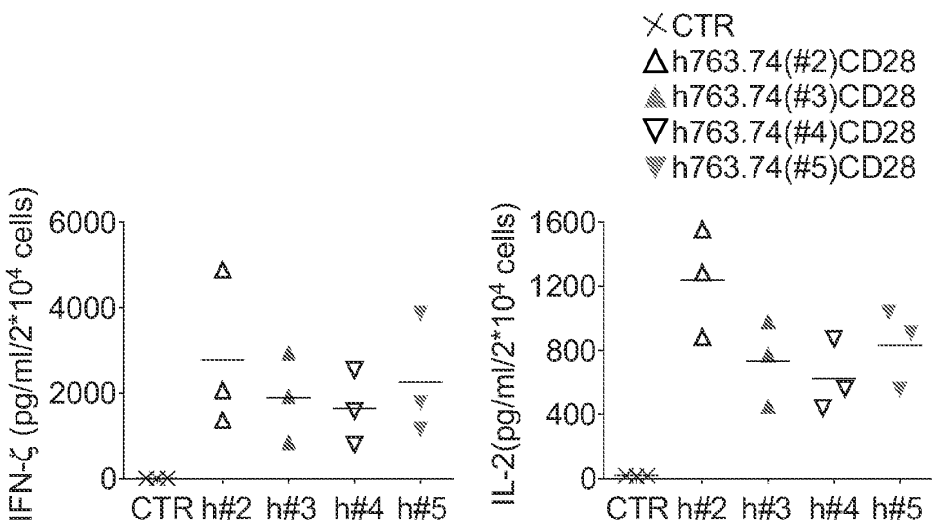


FIG. 12E

h763.74(#2)V _L	EIVMTQSPSTLSASVGDRIITCRASQTIYK ^{hFR1} NLHWYQQKPK ^{hFR2} LL ^{hFR3} YGS ^{hFR4} SDSIS
h763.74(#5)V _L	EIVMTQSPSTLSASVGDRIITCRASQTIYK ^{hFR1} NLHWYQQKPK ^{hFR2} LL ^{hFR3} YGS ^{hFR4} SDSIS
h763.74(#2)V _L	GVPSRFSGSGSGTE ^{hFR1} YLTISSLQPD ^{hFR2} DFATYCYCLQGYS ^{hFR3} TPWTFGGQTKLTVLG
h763.74(#5)V _L	GVPSRFSGSGSGTE ^{hFR1} YLTISSLQPD ^{hFR2} DFATYCYCLQGYS ^{hFR3} TPWTFGGQTKLTVLG
h763.74(#2)V _H	EVQLVESGGGLVQPGGSLRLSCTASGYTF ^{hFR1} TDYS ^{hFR2} SMHWVRQAPGKGLEWV ^{hFR3} GWINTATGEP
h763.74(#5)V _H	EVQLVESGGGLVQPGGSLRLSCTASGYTF ^{hFR1} TDYS ^{hFR2} SMHWVRQAPGKGLEWV ^{hFR3} GWINTATGEP
h763.74(#2)V _H	TYADDFKGRFTIS ^{hFR1} LDTSKNTVYLQMNSLRAEDTAVY ^{hFR2} CA ^{hFR3} YYD ^{hFR4} YWGGTLVTV
h763.74(#5)V _H	TYADDFKGRFTIS ^{hFR1} LDTSKNTVYLQMNSLRAEDTAVY ^{hFR2} CA ^{hFR3} YYD ^{hFR4} YWGGTLVTV

FIG. 13A

Physical stability of humanized CSPG4-specific scFvs.

	Number of mouse amino acid residues in the V _H and V _L frameworks	scFv stability			
		4°C		7°C	
		DAY 0	DAY 2	DAY 0	DAY 2
h763.74(#2)	3 and 3	91*	94	91	97
h763.74(#5)	1 and 2	96	96	96	97

*, the percentage of monomers analyzed by analytical HPLC. Proteins were expressed in *E.coli*, refolded and purified by chromatography. All proteins were formulated in PBS at 1mg/ml.

FIG. 13B

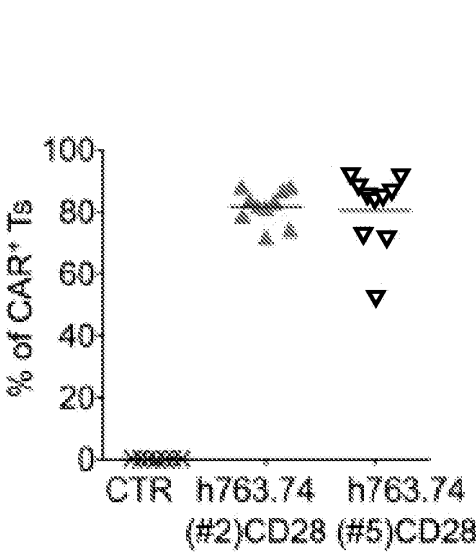


FIG. 14A

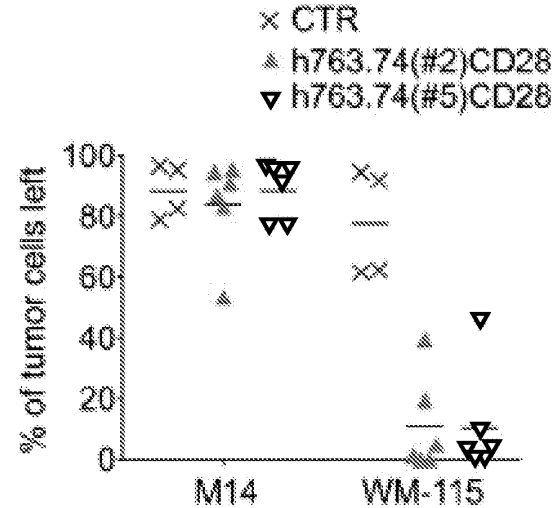


FIG. 14B

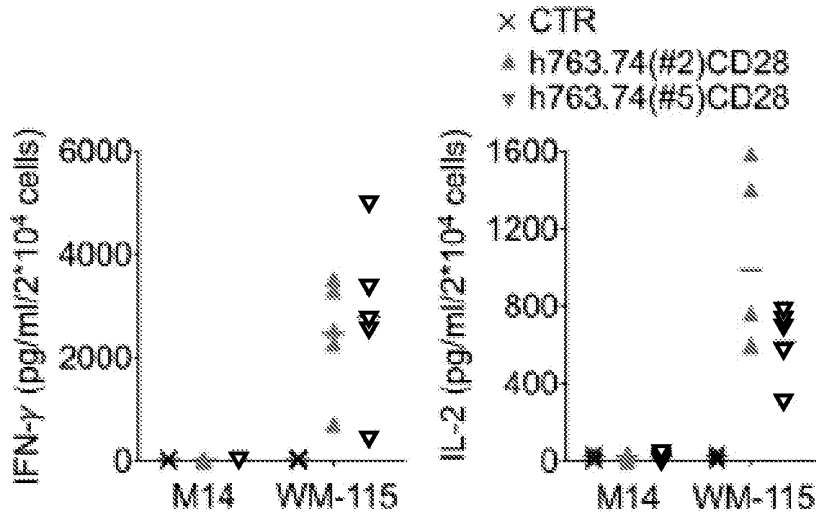


FIG. 14C

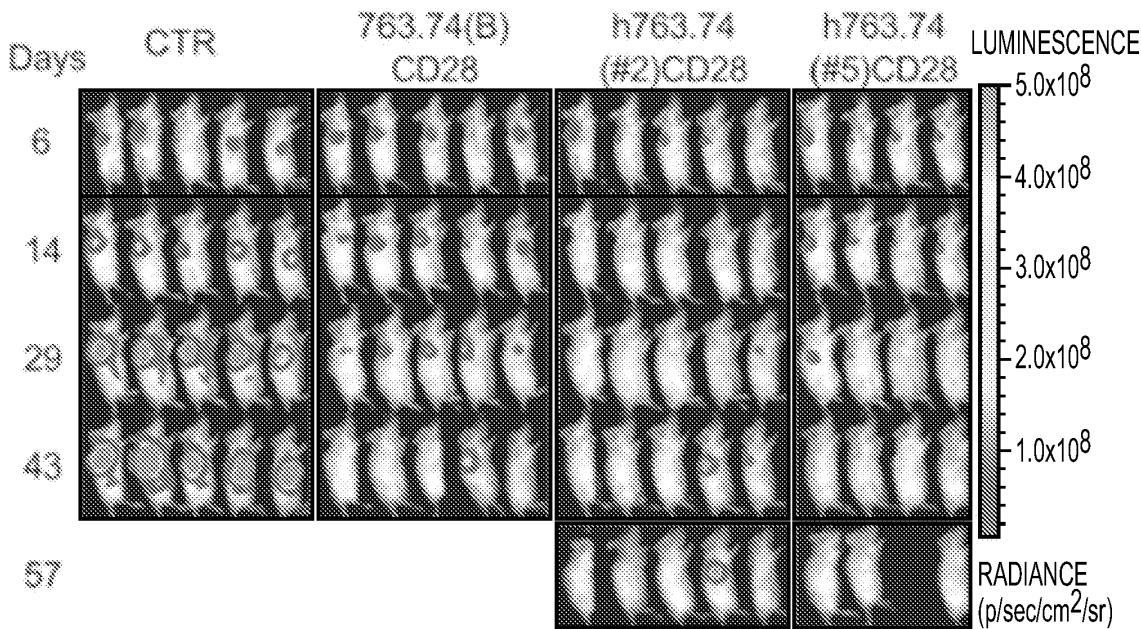


FIG. 14D

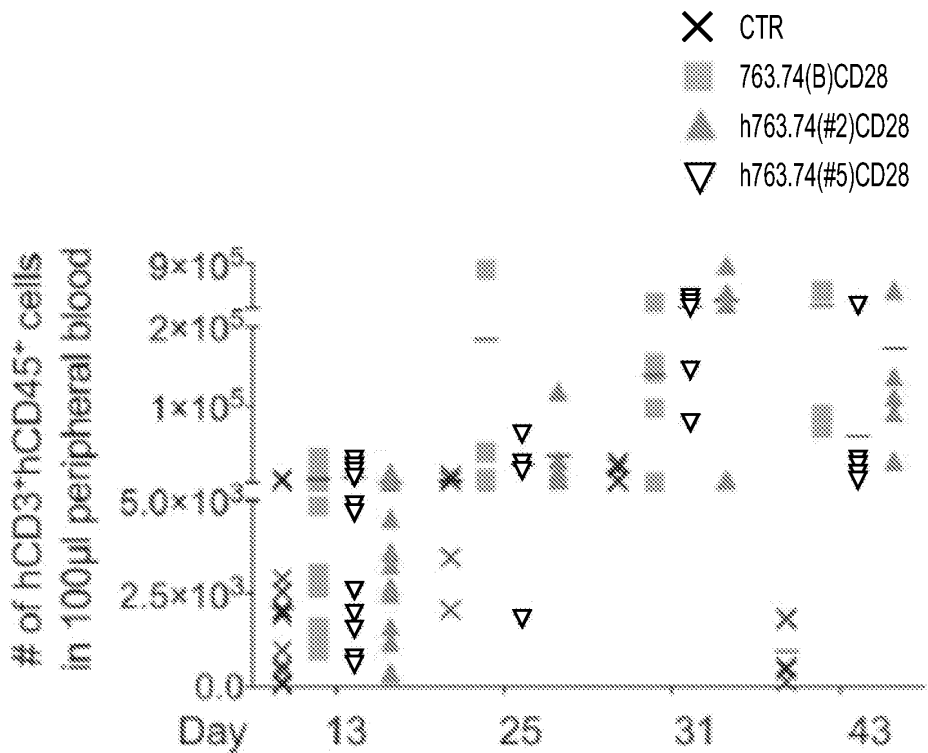


FIG. 14E

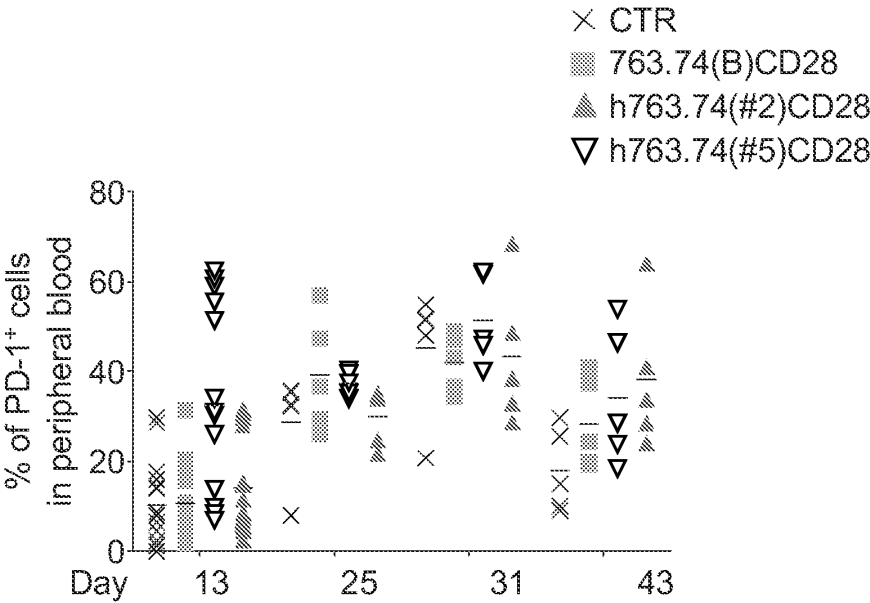


FIG. 14F

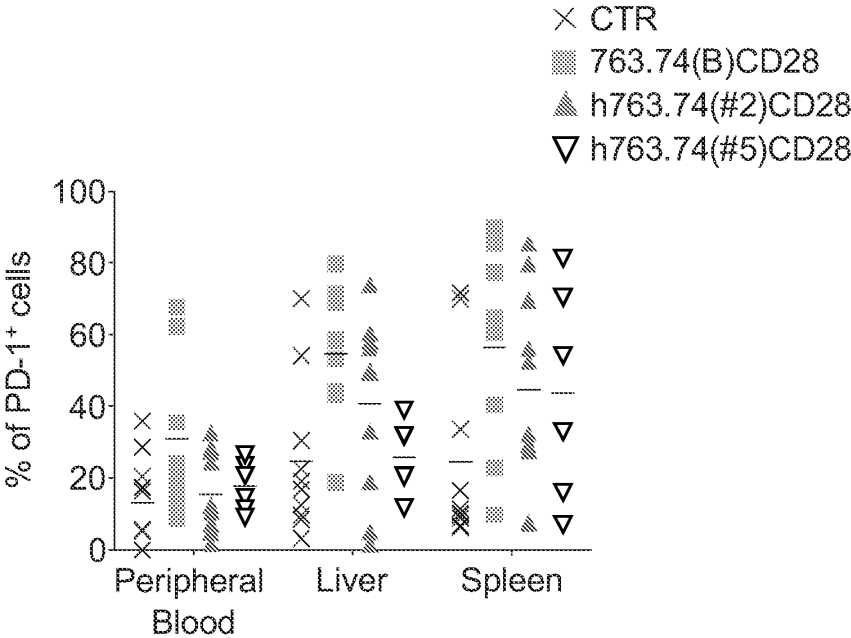


FIG. 14G