

FIGURE 1

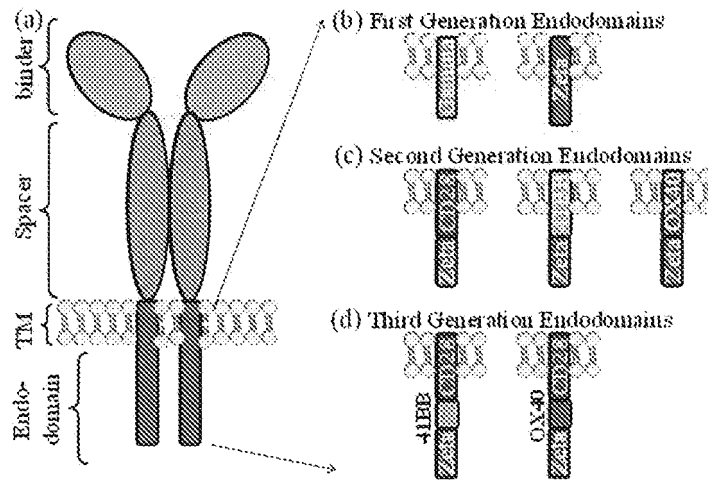


FIGURE 2

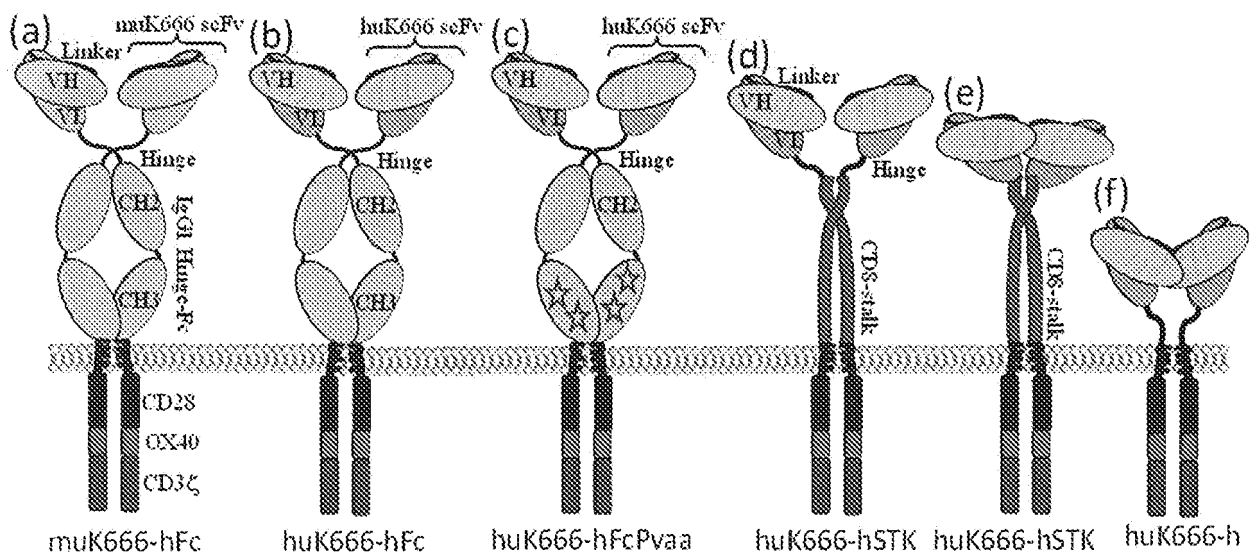


FIGURE 3

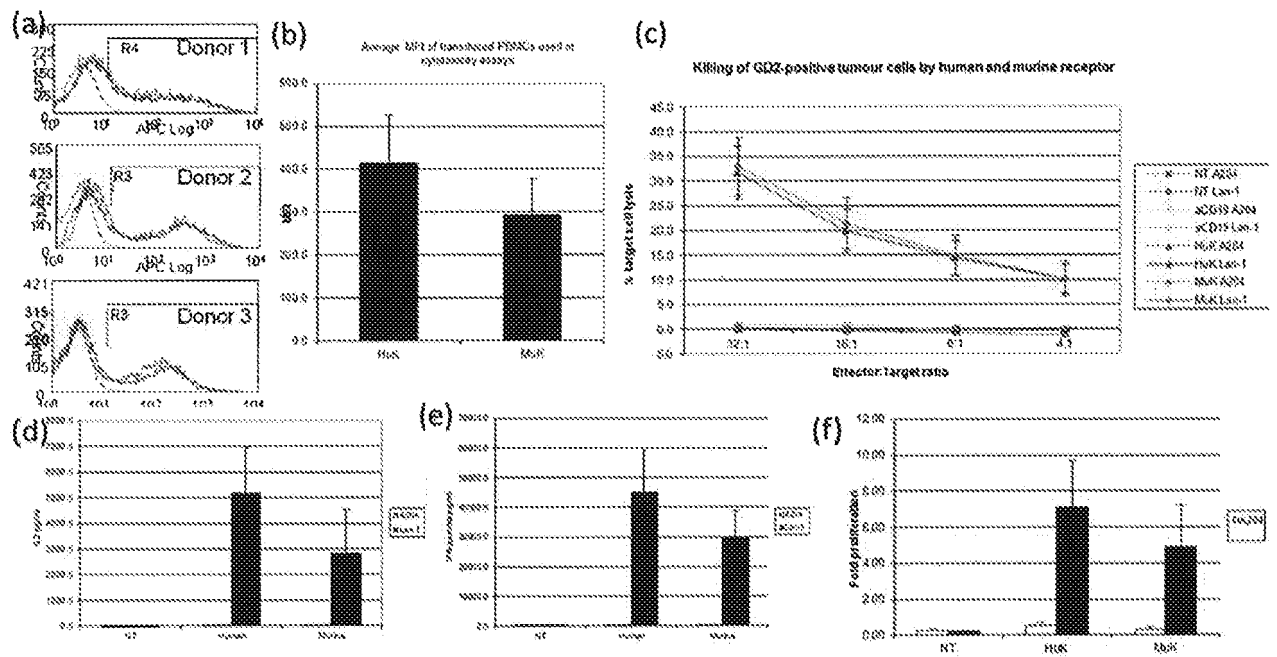


FIGURE 4

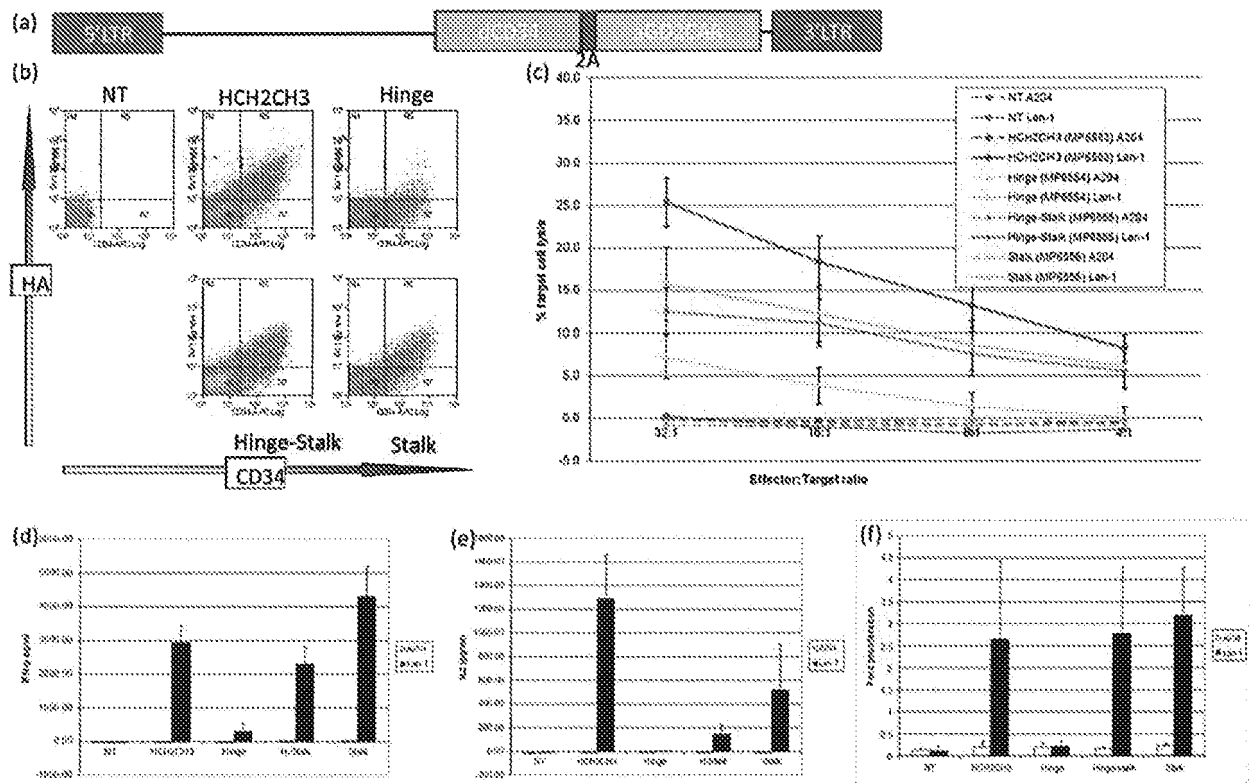


FIGURE 5

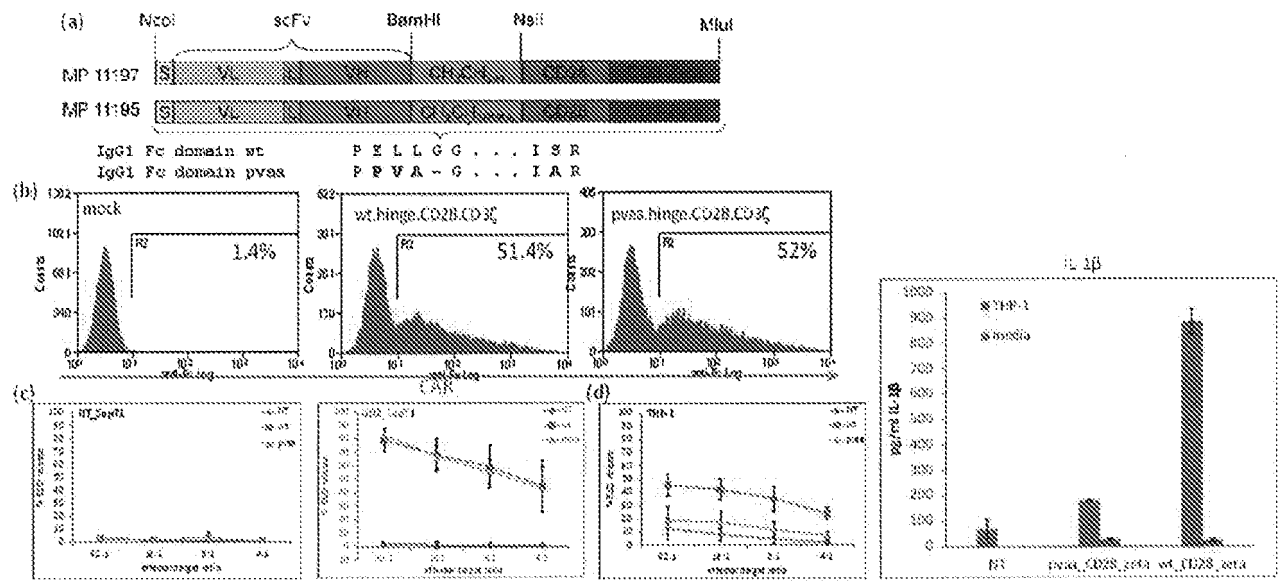


FIGURE 6

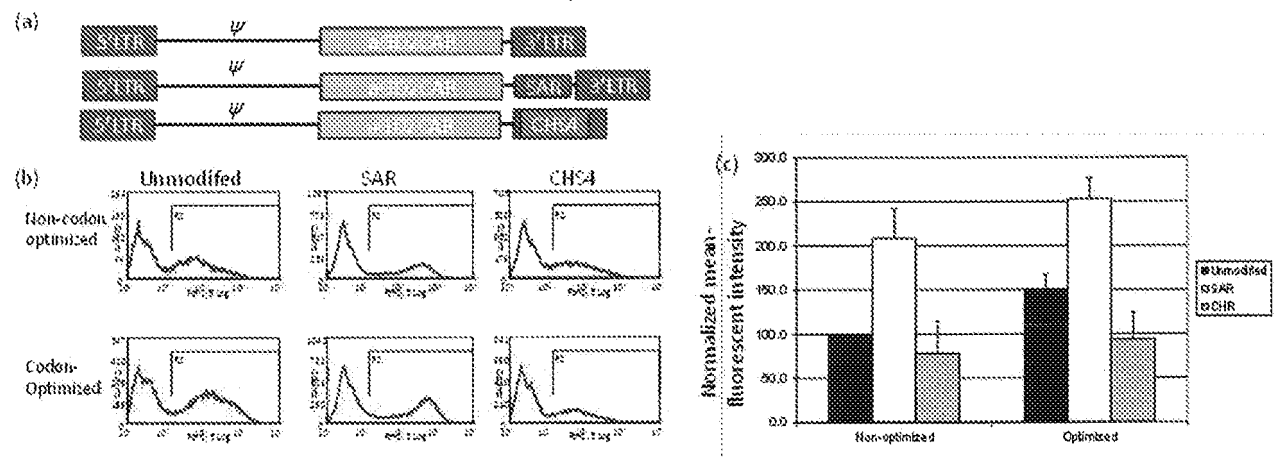


FIGURE 7

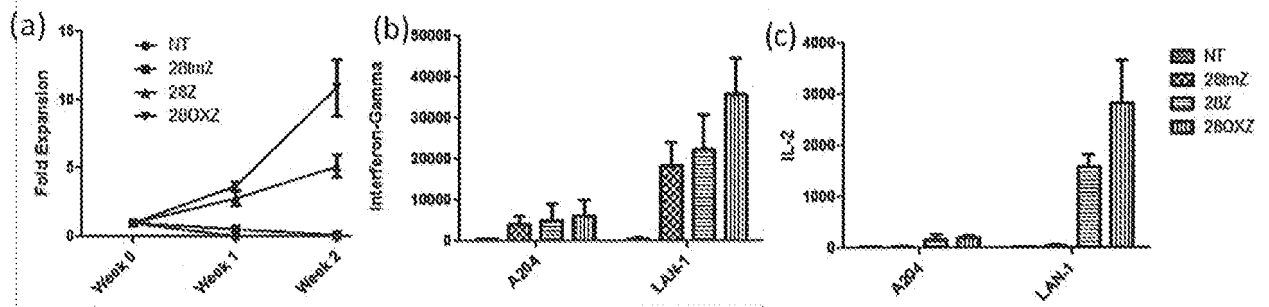


FIGURE 8

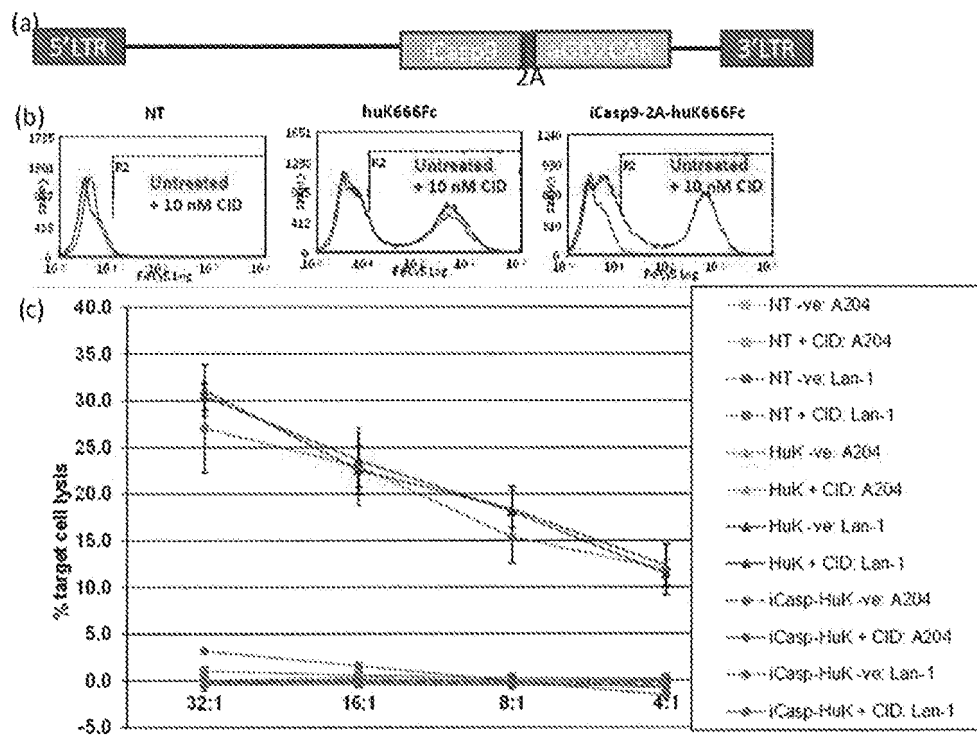


FIGURE 9

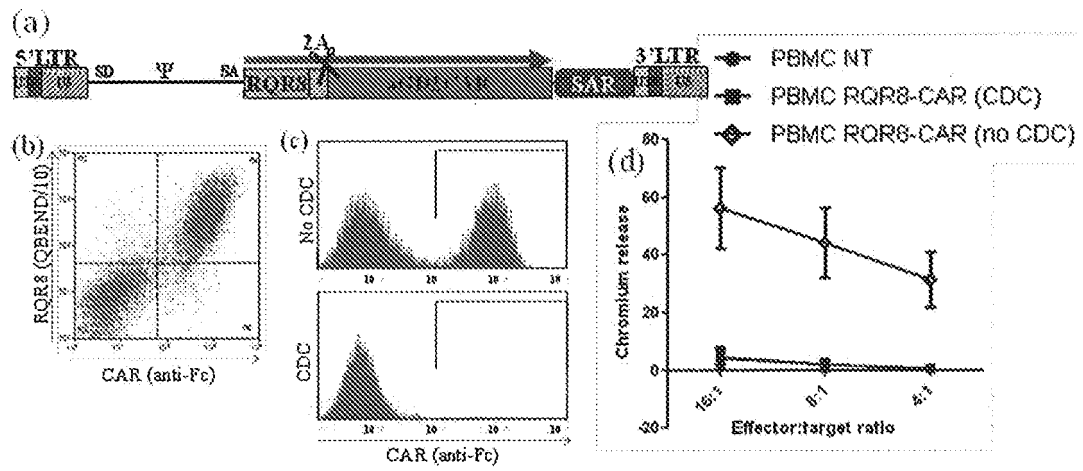


FIGURE 10

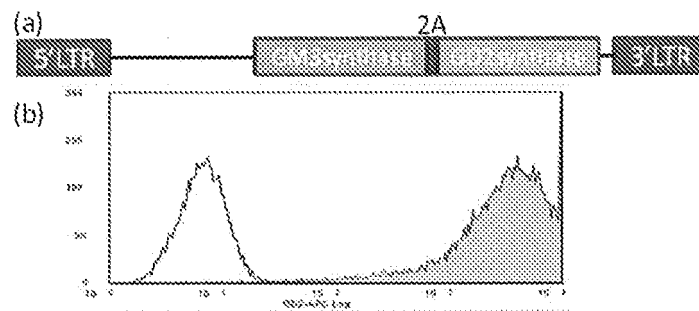


FIGURE 11

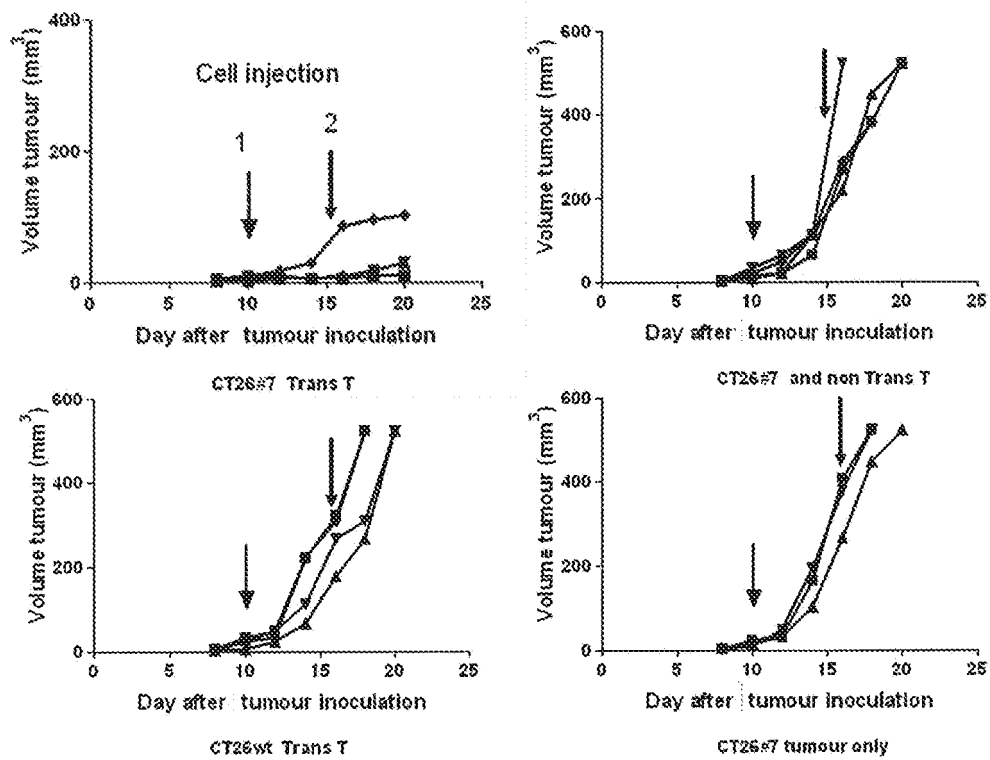


FIGURE 12

A.

METDTLLLVLLLVVPGSTGQVQLKESGPFVLVAPSOTLSITCTVSGFSLASYNHWRQPPGKGLEWLGVIWAGGS
 TNYSALMSRLTISKDNKSKQVFLKMSLTAAATAVYYCAKRSDDYSWFAYWGQGLVTVSSAGGSGGGSGGGSGGG
 GSENVLTQSPAIMSASPGEKVTMTCRASSSVSSSYLHWYQOKSGASEKVIYISTSNLASGVPGRFSGSGSGTDTLT
 TISSVEAEDAATYYCQOYSSGYPITFGAGTKVEIKRSDP

FWVLVVGGVLACYSLLVTVAFIIFWV
 KSEPLLHSDYNNMTPRREGPTRKH/QPYAPPRDFAAYPSKQRLPEADARKPPGGSGERTETIQEQADAHSTLAKI
 VPSRCAAPVYQSPQDYNFNLCPHETVVDPAKSDPKMSGAPKVFPSVPELRDPAVSNATIGHN
 ARRGKCHGGLVGLSTATDTYDALHQAALPFR

B.

METDTLLLVLLLVVPGSTGQVQLQESGPGFLVKPSQTLSTCTVSGFSLASYNHWRQPPGKGLEWLGVIWAGGS
 TNYSALMSRLTISKDNKSKQVFLKMSLTAAATAVYYCAKRSDDYSWFAYWGQGLVTVSSGGGSGGGSGGGSGGG
 SENQMTQSPSSLSASVGDRTMTCRASSSVSSSYLHWYQOKSGKAPKVIYISTSNLASGVPGRFSGSGSGTDTLT
 ISSLPEDFATYYCQOYSSGYPITFGQGTKVEIKRSDP

FWVLVVGGVLACYSLLVTVAFIIFWV
 KSEPLLHSDYNNMTPRREGPTRKH/QPYAPPRDFAAYPSKQRLPEADARKPPGGSGERTETIQEQADAHSTLAKI
 VPSRCAAPVYQSPQDYNFNLCPHETVVDPAKSDPKMSGAPKVFPSVPELRDPAVSNATIGHN
 ARRGKCHGGLVGLSTATDTYDALHQAALPFR

C.

METDTLLLVLLLVVPGSTGQVQLQESGPGFLVKPSQTLSTCTVSGFSLASYNHWRQPPGKGLEWLGVIWAGGS
 TNYSALMSRLTISKDNKSKQVFLKMSLTAAATAVYYCAKRSDDYSWFAYWGQGLVTVSSGGGSGGGSGGGSGGG
 SENQMTQSPSSLSASVGDRTMTCRASSSVSSSYLHWYQOKSGKAPKVIYISTSNLASGVPGRFSGSGSGTDTLT
 ISSLPEDFATYYCQOYSSGYPITFGQGTKVEIKRSDP

FWVLVVGGVLACYSLLVTVAFIIFWV
 KSEPLLHSDYNNMTPRREGPTRKH/QPYAPPRDFAAYPSKQRLPEADARKPPGGSGERTETIQEQADAHSTLAKI
 VPSRCAAPVYQSPQDYNFNLCPHETVVDPAKSDPKMSGAPKVFPSVPELRDPAVSNATIGHN
 ARRGKCHGGLVGLSTATDTYDALHQAALPFR

D.

METDTLLLVLLLVVPGSTGQVQLQESGPGFLVKPSQTLSTCTVSGFSLASYNHWRQPPGKGLEWLGVIWAGGS
 TNYSALMSRLTISKDNKSKQVFLKMSLTAAATAVYYCAKRSDDYSWFAYWGQGLVTVSSGGGSGGGSGGGSGGG
 SENQMTQSPSSLSASVGDRTMTCRASSSVSSSYLHWYQOKSGKAPKVIYISTSNLASGVPGRFSGSGSGTDTLT
 ISSLPEDFATYYCQOYSSGYPITFGQGTKVEIKRSDP

FWVLVVGGVLACYSLLVTVAFIIFWV
 KSEPLLHSDYNNMTPRREGPTRKH/QPYAPPRDFAAYPSKQRLPEADARKPPGGSGERTETIQEQADAHSTLAKI
 VPSRCAAPVYQSPQDYNFNLCPHETVVDPAKSDPKMSGAPKVFPSVPELRDPAVSNATIGHN
 ARRGKCHGGLVGLSTATDTYDALHQAALPFR

E.

METDTLLLVLLLVVPGSTGQVQLQESGPGFLVKPSQTLSTCTVSGFSLASYNHWRQPPGKGLEWLGVIWAGGS
 TNYSALMSRLTISKDNKSKQVFLKMSLTAAATAVYYCAKRSDDYSWFAYWGQGLVTVSSGGGSGGGSGGGSGGG
 SENQMTQSPSSLSASVGDRTMTCRASSSVSSSYLHWYQOKSGKAPKVIYISTSNLASGVPGRFSGSGSGTDTLT
 ISSLPEDFATYYCQOYSSGYPITFGQGTKVEIKRSDP

FWVLVVGGVLACYSLLVTVAFIIFWV
 KSEPLLHSDYNNMTPRREGPTRKH/QPYAPPRDFAAYPSKQRLPEADARKPPGGSGERTETIQEQADAHSTLAKI
 VPSRCAAPVYQSPQDYNFNLCPHETVVDPAKSDPKMSGAPKVFPSVPELRDPAVSNATIGHN
 ARRGKCHGGLVGLSTATDTYDALHQAALPFR

FIGURE 12 contd.

Region	Description
suicide gene	Either iCasp9 or RQR8
FMD 2A	Foot-and-mouth disease 2A peptide
Signal	Signal peptide
scFv1	scFv (either muKM666 or huKM666)
SDP	Linker and chain break
stalk	CD8alpha stalk
CD28 TM	CD28 transmembrane domain
CD28 endo	CD28 endodomain
OX40 endo	OX40 endodomain
CD3Z endo	CD3 Zeta endodomain

FIGURE 13

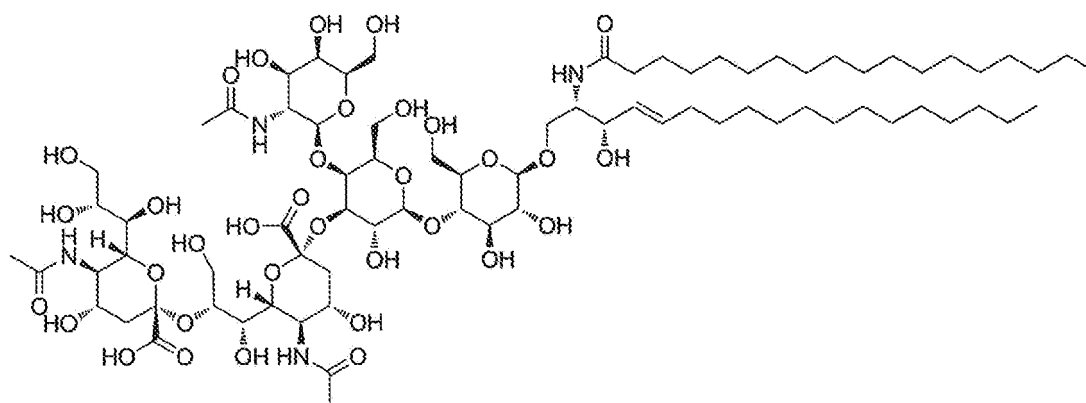


FIGURE 14

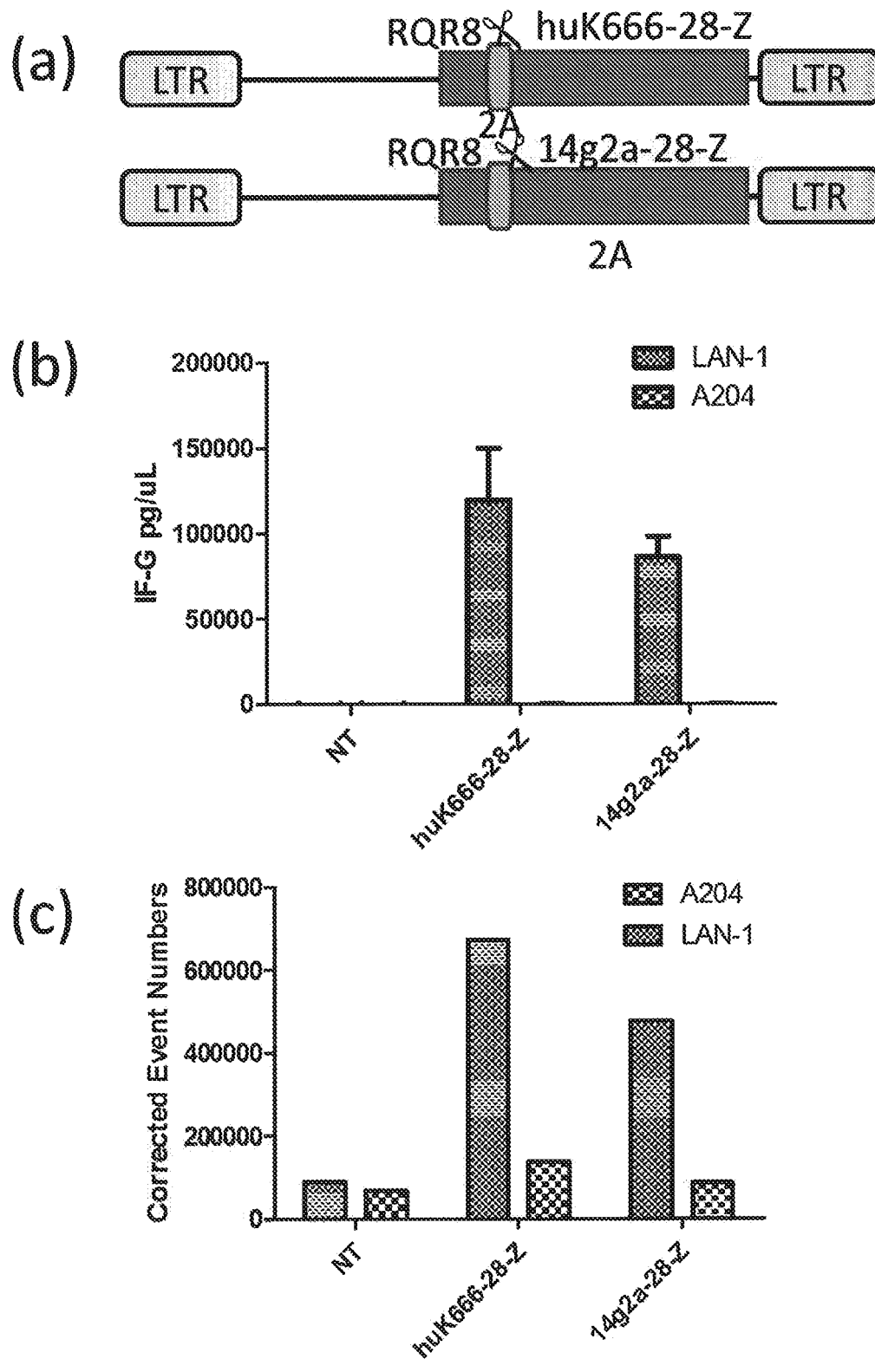
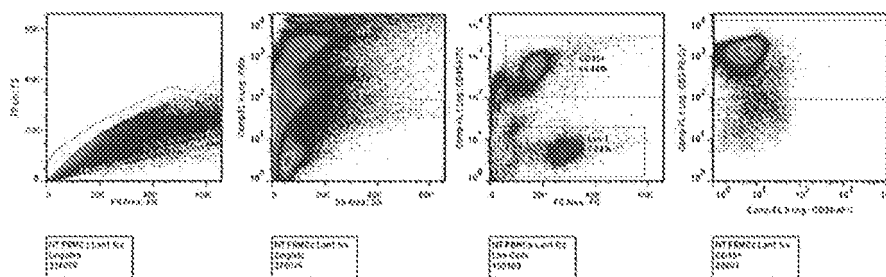


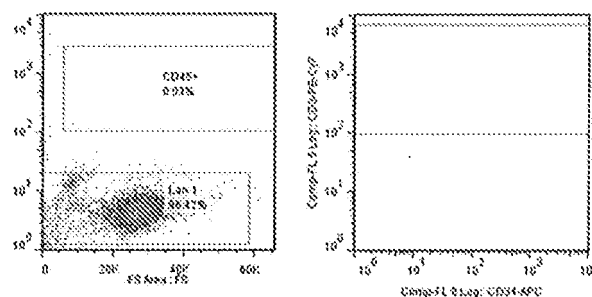
FIGURE 15

(a) Singles → Live Cells → CD45+ → CD3+ vs CD34+



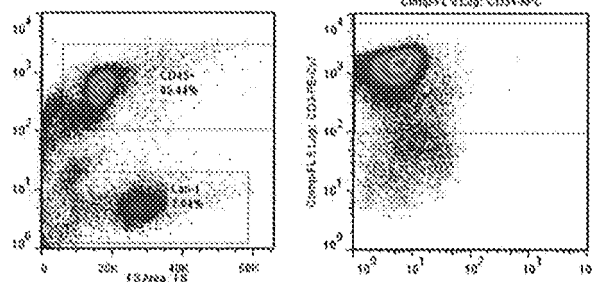
(b)

Lan 1 Alone



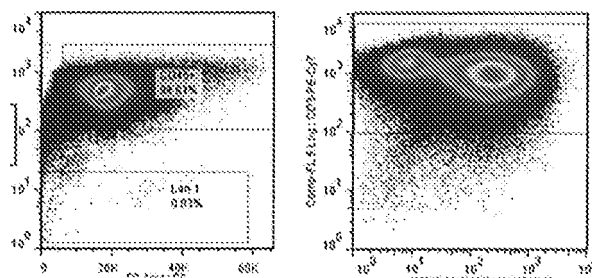
(c)

NT
PBMCs +
Lan-1



(d)

HuK-28Zeta +
Lan1



(e)

14g2a-28Zeta +
Lan1v

