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(54) Title: ANTI-B7-H4 CHIMERIC ANTIGEN RECEPTOR-MODIFIED NK-92 CELLS

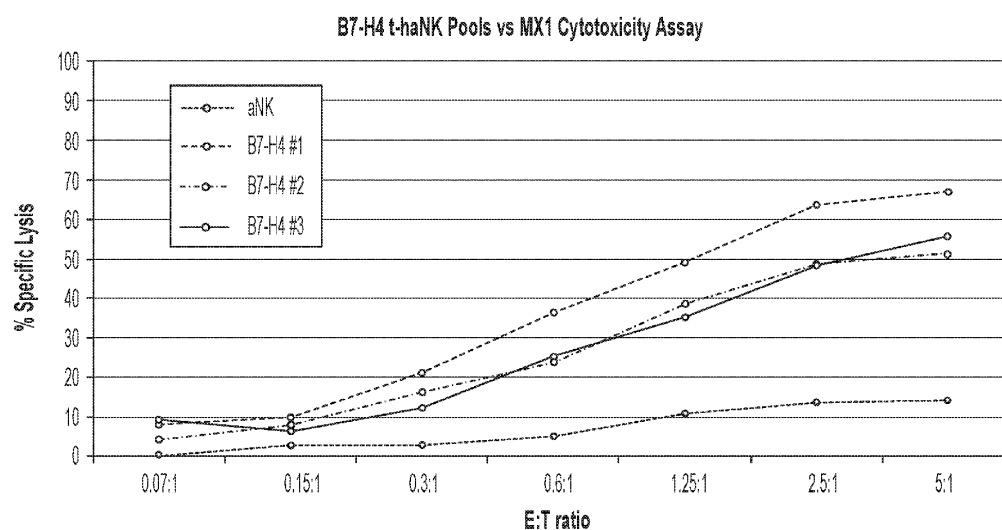


FIG. 7

(57) Abstract: Recombinant NK cells, and particularly recombinant NK-92 cells express an anti-B7-H4 chimeric antigen receptor (CAR) having an intracellular domain of FcεRIγ. Most notably, CAR constructs with an intracellular domain of FcεRIγ had a significantly extended duration of expression and cytotoxicity over time. The anti-B7-H4 CAR may be expressed from RNA and DNA, preferably from a tricistronic construct that further encodes CD16 and a cytokine to confer autocrine growth support. Advantageously, such constructs also enable high levels of transfection and expression of the recombinant proteins and provide a convenient selection marker to facilitate rapid production of recombinant NK/NK-92 cells.

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