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(54) **Title**: USE OF THE CD2 SIGNALING DOMAIN IN SECOND-GENERATION CHIMERIC ANTIGEN RECEPTORS

(57) **Abstract**: The present invention provides compositions and methods for treating cancer in a human. The invention includes relates to administering a genetically modified T cell expressing a CAR having an antigen binding domain, a transmembrane domain, a CD2 signaling domain, and a CD3 zeta signaling domain. The invention also includes incorporating CD2 into the CAR to alter the cytokine production of CAR-T cells in both negative and positive directions.

CD19: CD2zeta CAR (SEQ ID NO: 1)

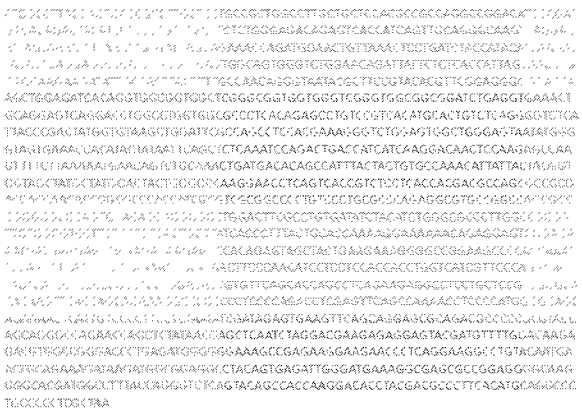


Figure 1

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