

ABSTRACT

Disclosed herein are recombinant nucleic acids, comprising a 5' untranslated (5'-UTR) sequence portion, a signal peptide sequence portion, a single chain antibody fragment sequence portion, a hinge region sequence portion, a transmembrane domain sequence portion, and one or more intracellular domain sequence portions. Also disclosed herein are modified natural killer (NK) cells comprising the recombinant nucleic acid described above. Further disclosed herein are methods of treating a tumor in a subject by administering the modified NK cells.