

ABSTRACT**CHIMERIC ANTIGEN RECEPTOR AGAINST HUMAN CD19 ANTIGEN AND ITS APPLICATION**

Provided is a chimeric antigen receptor (CAR) against human CD19 antigen, consisting of a single-chain antibody (scFv) recognizing human CD19 antigen, a hinge region, a transmembrane region, and an intracellular signaling domain connected in sequence. The single-chain antibody (scFv) recognizing human CD19 antigen has an amino acid sequence as shown in SEQ ID NOs. 1, 2, 3, 4, 35, 36, or 37. The CAR is expressed in an immune cell, can eliminate a tumor cell, and can be used in a targeted therapy for a tumor.

Figure 14