ABSTRACT

CRISPR-CAS-RELATED METHODS, COMPOSITIONS AND COMPONENTS FOR CANCER IMMUNOTHERAPY

CRISPR/Cas-related composition and methods for treatment of cancer, in particular by using gRNA molecules comprising a targeting domain which is complementary with a target domain from the FAS, BID, CTLA4, PDCD1, CBLB, PTPN6, TRAC or TRBC gene. In some embodiments, gRNAs are used with Cas9 enzymes to cause a cleavage event in said genes within engineered chimeric antigen receptor (CAR) T cells. In some embodiments, CAR T cells are modified to reduce, decrease or repress expression of said genes using gRNAs and Cas9 enzymes; said modified CAR T-cells are meant for therapeutic uses, especially for cancer.

[FIG. 1A]