ABSTRACT

The present application belongs to the technical field of immunotherapy, and specifically relates to a fusion protein for reversing a tumor microenvironment, a tumor immunosuppressive and resistant CAR and an expression vector, an immune cell and the use. The fusion protein is combined with different CAR structures of different targets, such as CEA, CD19, PSCA and BCMA, to form the tumor immunosuppressive and resistant CAR, or is used in combination with same to target and kill CD47 positive tumor cells; and the tumor immunosuppressive and resistant CAR and immune cells break through the influences of inhibitory signals on the function of CAR-T, which realizes the effectiveness of CAR-T treatment and can also ensure a certain degree of safety at the same time.