ABSTRACT

COMPOSITIONS AND METHODS FOR SELECTIVE PROTEIN EXPRESSION

Provided herein are fusion proteins including two protein domains separated by a heterologous protease cleavage site, wherein a first of the protein domains is a conditional expression domain. Thus, the fusion proteins comprise three essential elements: a conditional expression domain, a domain containing the protein of interest, and a protease cleavage domain separating the two. Also provided herein are methods for treating autoantibody and alloantibody-mediated diseases or conditions in a subject by targeting B cells with anti-B cell modified T cells. In one embodiment, a chimeric antigen receptor (CAR) modified T cell is selectively ablated in a subject after adoptive transfer. Pharmaceutical compositions comprising the temporally regulated CAR modified T cell are also described herein.

No Figure