T CELL-ANTIGEN COUPLER WITH VARIOUS CONSTRUCT OPTIMIZATIONS

ABSTRACT

A trifunctional molecule is provided, comprising (i) a target-specific ligand, (ii) a ligand that binds a protein associated with a TCR complex, and (iii) a T cell receptor signaling domain polypeptide. Variants of the molecule are provided, including variants that exhibit optimized surface expression, transduction efficiency, and effector functionality. Variations include, for example, different ligands that bind CD3 epsilon (e.g., OKT3, L2K, F6A, UCHT1 and humanized UCHT1), different signaling domains, and different linkers between domains.

[Fig 1A]