

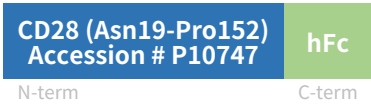
Rev04
Update: Mar,01,2022

DATASHEET

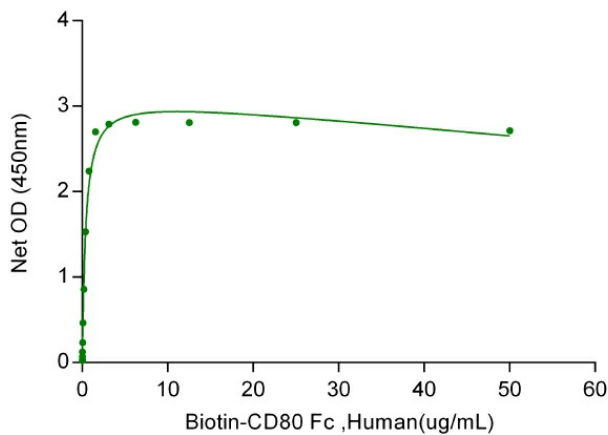
CD28 Fc Chimera, Human

Cat. No.: Z03413

Product Introduction

Species	Human
Protein Construction	 CD28 (Asn19-Pro152) Accession # P10747 hFc N-term C-term
Purity	> 97% as analyzed by SDS-PAGE
Endotoxin Level	< 0.2 EU/μg of protein by gel clotting method
Biological Activity	Immobilized CD28, hFc, Human at 2.0 μg/ml (100 μl/well) can bind human Biotin-B7-1(CD80) Fc when detected by Streptavidin-HRP second antibody.
Expression System	HEK 293
Apparent Molecular Weight	66~70 kDa, on SDS-PAGE under reducing conditions.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH ₂ O or PBS up to 100 μg/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

Examples



Immobilized human CD28 Fc at $2\mu\text{g/mL}$ ($100\mu\text{L/well}$) can bind human Biotin-B7-1(CD80) Fc with a linear range of $0.01\text{-}0.5\mu\text{g/mL}$.

Background

Target Background : Human CD28 is composed of four exons encoding a protein of 220 amino acids that is expressed on the cell surface as a glycosylated, disulfide-linked homodimer of 44 kDa. Members of the CD28 family share a number of common features. These receptors consist of paired V-set immunoglobulin superfamily (IgSF) domains attached to single transmembrane domains and cytoplasmic domains that contain critical signaling motifs. The CD28 and CTLA4 ligands, CD80 and CD86, consist of single V-set and C1-set IgSF domains. The interaction of these costimulatory receptors with ligands is mediated through the MYPPPY motif within the receptor V-set domains. CD28 is expressed constitutively on almost all human CD4 T cells and approximately 50% of CD8 T cells. CD28 costimulation has diverse effects on T cell function, including biochemical events at the immunological synapse, downstream phosphorylation and other post-translational modifications, transcriptional changes, and cytoskeletal remodeling. At the most basic level, CD28 signals increase a cell's glycolytic rate, allowing cells to generate the energy necessary for growth and proliferation.

Synonyms : CD28 antigen (Tp44); CD28 antigen; CD28 molecule; CD28

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.