

Human CellExp™ CD28, Human recombinant

CATALOG NO: 9237-10 10 µg
9237-100 100 µg

ALTERNATE NAMES: CD28, Tp44

SOURCE: HEK 293 cells (Asn 19 - Pro 152)

PURITY: > 97% by SDS-PAGE

MOL. WEIGHT: This protein is fused with human IgG1 Fc tag at C terminus and the protein has a calculated MW of 41.8kDa. The predicted N-terminus is Asn19. The protein migrates as 66-70 kDa in SDS-PAGE under reducing conditions

ENDOTOXIN LEVEL: < 0.2 EU per 1µg of protein (determined by LAL method)

FORM: Lyophilized

FORMULATION: Lyophilized from 0.22 µm filtered solution in PBS, pH7.4.

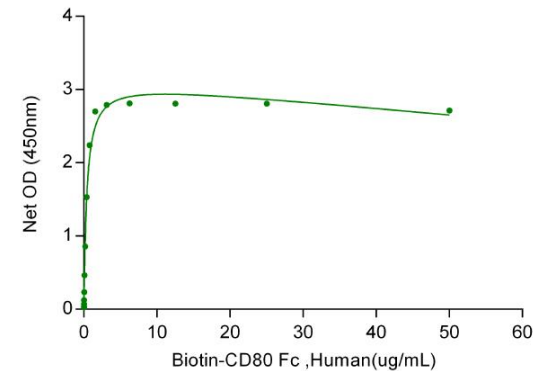
STORAGE CONDITIONS: Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freezing and thawing cycles.

RECONSTITUTION: Centrifuge the vial prior to opening. Reconstitute in ddH₂O or sterile PBS, pH 7.4. Do not vortex. For extended storage, it is recommended to store at -20°C.

DESCRIPTION: 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.

BIOLOGICAL ACTIVITY:

Immobilized human CD28 at 2 µg/mL (100 µL/well) can bind human Biotin-B7-1 (CD80) Fc with a linear range of 0.01-0.5 µg/mL when detected by Streptavidin-HRP second antibody.



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RELATED PRODUCT:

- Human CellExp™ CCL6, mouse recombinant (Cat. No. 7226-10, -50)
- Human CellExp™ CD155, human recombinant (Cat. No. 7462-10, -50)
- Human CellExp™ CD160/BY55, human recombinant (Cat. No. 7386-10, -50)
- Human CellExp™ CD166/ ALCAM, human recombinant (Cat. No. 7437-10, -50)
- Human CellExp™ CD172A / SIRP, human recombinant (Cat. No. 7506-10, -50)
- Human CellExp™ CD33 / SIGLEC-3, human recombinant (Cat. No. 7370-10, -50)
- Human CellExp™ CD47, human recombinant (Cat. No. 7385-10, -50)
- Human CellExp™ CD55/DAF, human recombinant (Cat. No. 7432-10, -50)
- Human CellExp™ CD58 /LFA-3, human recombinant (Cat. No. 7427-10, -50)
- Human CellExp™ CD62E/E-Selectin, human recombinant (Cat. No. 7434-20, -100)
- Human CellExp™ CD71 / TFRC / TFR, human recombinant (Cat. No. 7279-10, -50)
- Human CellExp™ CD273, human recombinant (Cat. No. 7369-10, -50)

FOR RESEARCH USE ONLY! Not to be used on humans.

