

## HUMAN CD28 PROTEIN, MFC-HIS TAG

**Cat.#:** 11142

**Product Name:** Human CD28 Protein

**Size:** 10 µg, 50 µg and 100 µg

**Synonyms:** CD28;Tp44

**Target:** CD28

**UNIPROT ID:** P10747

**Description:** Recombinant human CD28 protein with C-terminal mouse Fc and 6xHis tag

**Background:** The protein encoded by this gene is essential for T-cell proliferation and survival, cytokine production, and T-helper type-2 development. Several alternatively spliced transcript variants encoding different isoforms have been found for this gene.

**Species/Host:** HEK293

**Molecular Weight:** The protein has a predicted molecular mass of 68-72 kDa after removal of the signal peptide.

**Molecular Characterization:** CD28(Asn19-Pro152) mFc(Pro99-Lys330) 6×His

**Purity:** The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.

**Formulation & Reconstitution:** Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

**Storage & Shipping:** Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

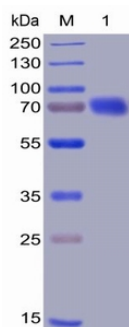


Figure 1. Human CD28 Protein, mFc-His Tag on SDS-PAGE under reducing condition.

### Human CD28, mFc-His Tagged protein ELISA

0.2 µg of B7-1, hFc Tagged protein per well

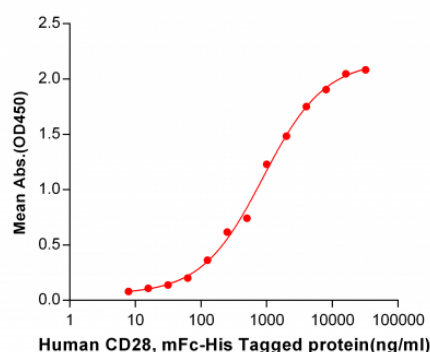


Figure 2. ELISA plate pre-coated by 2 µg/ml (100 µl/well) Human B7-1, hFc tagged protein 11283 can bind Human CD28, mFc-His tagged protein (11142) in a linear range of 125-4000 ng/ml.

### Human CD28, mFc-His Tagged protein ELISA

0.2 µg of B7-2, hFc Tagged protein per well

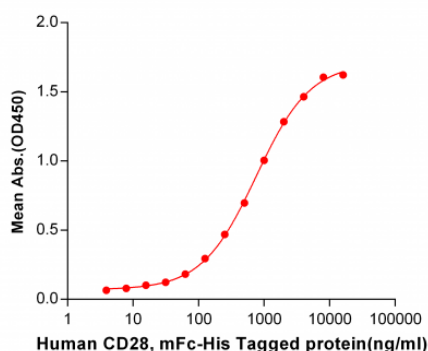


Figure 3. ELISA plate pre-coated by 2 µg/ml (100 µl/well) Human B7-2, anti-mouse IgG secondary antibody. hFc tagged protein 11284 can bind Human CD28, mFc-His tagged protein (11142) in a linear range of 62.5-4000 ng/ml.

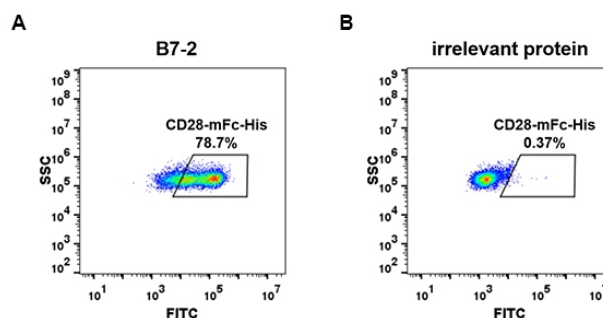


Figure 4. HEK293 cell line transfected with irrelevant protein (B) and human B7-2 (A) were surface stained with Human CD28, mFc-His tagged protein (11142) 1µg/ml followed by Alexa 488-conjugated