

HUMAN B7-2 PROTEIN, HFC TAG

Cat.#: 11284

Product Name: Human B7-2 Protein

Size: 10 µg, 50 µg and 100 µg

Synonyms: CD86;B7-2;B70;CD28LG2;LAB72;MGC34413

Target: B7-2

UNIPROT ID: P42081

Description: Recombinant human B7-2 protein with C-terminal human Fc tag

Background: This gene encodes a type I membrane protein that is a member of the immunoglobulin superfamily. This protein is expressed by antigen-presenting cells, and it is the ligand for two proteins at the cell surface of T cells, CD28 antigen and cytotoxic T-lymphocyte-associated protein 4. Binding of this protein with CD28 antigen is a costimulatory signal for activation of the T-cell. Binding of this protein with cytotoxic T-lymphocyte-associated protein 4 negatively regulates T-cell activation and diminishes the immune response. Alternative splicing results in several transcript variants encoding different isoforms.

Species/Host: HEK293

Molecular Weight: The protein has a predicted molecular mass of 51.5 kDa after removal of the signal peptide.

Molecular Characterization: B7-2(Leu26-Pro247) hFc(Glu99-Ala330)

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.

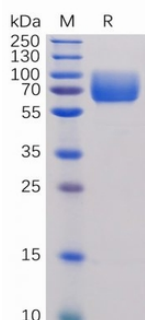


Figure 1. Human B7-2 Protein, hFc Tag on SDS-PAGE under reducing condition.

Human B7-2, hFc Tagged protein ELISA

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

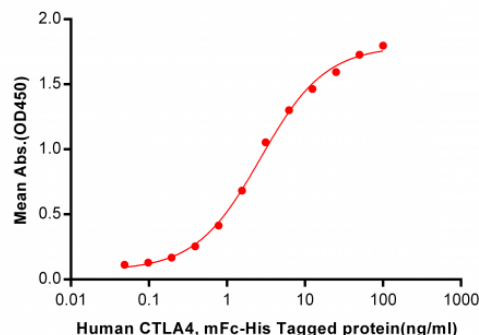


Figure 2. ELISA plate pre-coated by 2 µg/ml (100 µl/well) Human B7-2, hFc tagged protein (11284) can bind Human CTLA4, mFc-His tagged protein 11145 in a linear range of 0.048-2.694 ng/ml.

Human B7-2, hFc Tagged protein ELISA

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

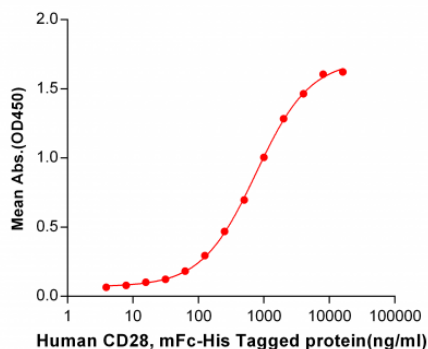


Figure 3. ELISA plate pre-coated by 2 µg/ml (100 µl/well) Human B7-2, hFc tagged protein (11284) can bind Human CD28, mFc-His tagged protein 11142 in a linear range of 62.5-4000 ng/ml.

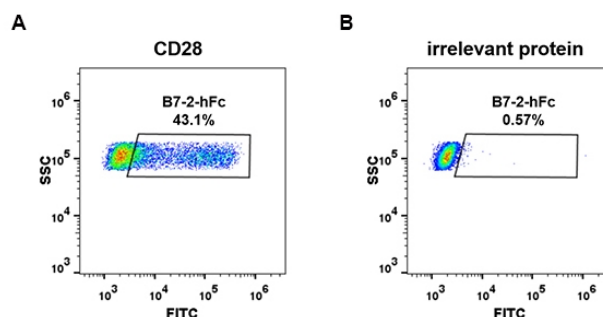


Figure 4. HEK293 cell line transfected with irrelevant protein (B) and human CD28 (A) were surface stained with Human B7-2, hFc tagged protein (11284) 1 µg/ml followed by Alexa 488-conjugated anti-human IgG secondary antibody.

