

## HUMAN B7-1 PROTEIN, HFC TAG

**Cat.#:** 11283

**Product Name:** Human B7-1 Protein

**Size:** 10 µg, 50 µg and 100 µg

**Synonyms:** CD80;7;7-1;7.1;B1;D28LG;D28LG1;AB7

**Target:** B7-1

**UNIPROT ID:** P33681

**Description:** Recombinant human B7-1 protein with C-terminal human Fc tag

**Background:** The protein encoded by this gene is a membrane receptor that is activated by the binding of CD28 or CTLA-4. The activated protein induces T-cell proliferation and cytokine production. This protein can act as a receptor for adenovirus subgroup B and may play a role in lupus neuropathy.

**Species/Host:** HEK293

**Molecular Weight:** The protein has a predicted molecular mass of 50.0 kDa after removal of the signal peptide.

**Molecular Characterization:** B7-1(Val35-Asn242) 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.

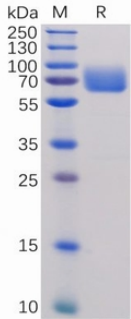


Figure 1. Human B7-1 Protein, hFc Tag on SDS-PAGE under reducing condition.

### Human B7-1, hFc Tagged protein ELISA

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

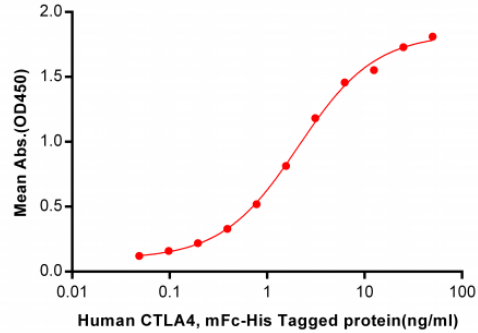


Figure 2. ELISA plate pre-coated by 2 µg/ml (100 µl/well) Human B7-1, hFc tagged protein (11283) can bind Human CTLA4, mFc-His tagged protein 11145 in a linear range of 0.048-2.094 ng/ml.

### Human B7-1, hFc Tagged protein ELISA

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

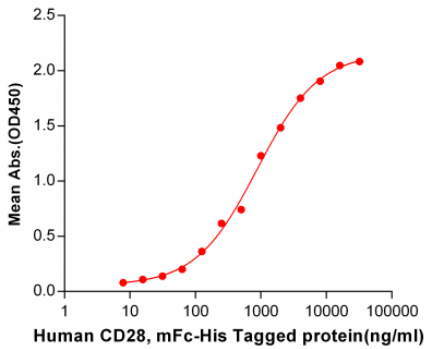


Figure 3. ELISA plate pre-coated by 2 µg/ml (100 µl/well) Human B7-1, hFc tagged protein (11283) can bind Human CD28, mFc-His tagged protein 11142 in a linear range of 125-4000 ng/ml.

### Human B7-1, hFc tagged protein ELISA

0.1 µg of Human B7-1, hFc tagged protein per well

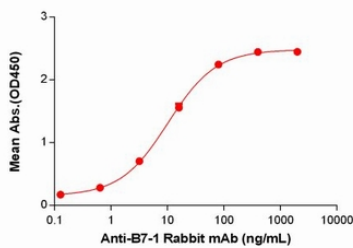


Figure 5. ELISA plate pre-coated by 1 µg/ml (100 µl/well) Human B7-1 Protein, hFc Tag (11283) can bind Anti-B7-1 Rabbit mAb in a linear range of 3.2-80 ng/mL.

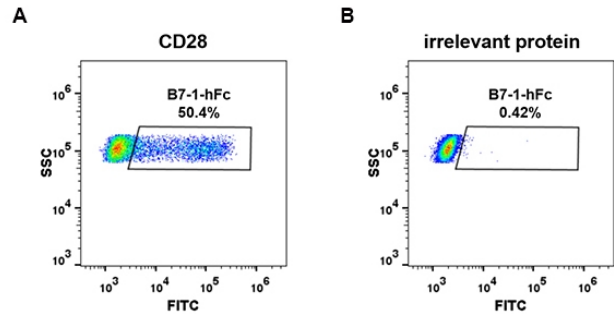


Figure 4. HEK293 cell line transfected with irrelevant protein (B) and human CD28 (A) were surface stained with Human B7-1, hFc tagged protein (11283) 1 µg/ml followed by Alexa 488-conjugated anti-human IgG secondary antibody.