

## HUMAN PD-1 PROTEIN, HFC-HIS TAG

**Cat.#:** 11274

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

**Size:** 10 µg, 50 µg and 100 µg

**Synonyms:** PDCD1;PD1;CD279;SLEB2

**Target:** PD-1

**UNIPROT ID:** Q15116

**Description:** Recombinant human PD-1 protein with C-terminal human Fc and 6xHis tag

**Background:** This protein is expressed in pro-B-cells and is thought to play a role in their differentiation. In mice, expression of this gene is induced in the thymus when anti-CD3 antibodies are injected and large numbers of thymocytes undergo apoptosis. Mice deficient for this gene bred on a BALB/c background developed dilated cardiomyopathy and died from congestive heart failure. These studies suggest that this gene product may also be important in T cell function and contribute to the prevention of autoimmune diseases.

**Species/Host:** HEK293

**Molecular Weight:** The protein has a predicted molecular mass of 42.9 kDa after removal of the signal peptide.

**Molecular Characterization:** PD-1(Leu25-Gln167) hFc(Glu99-Ala330) 6×His tag

**Purity:** The purity of the protein is greater than 90% 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.

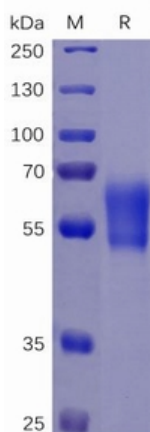


Figure 1. Human PD-1 Protein, hFc-His Tag on SDS-PAGE under reducing condition.

## Human PD1, hFc-His Tagged protein ELISA

0.2 µg of PD1, hFc-His Tagged protein per well

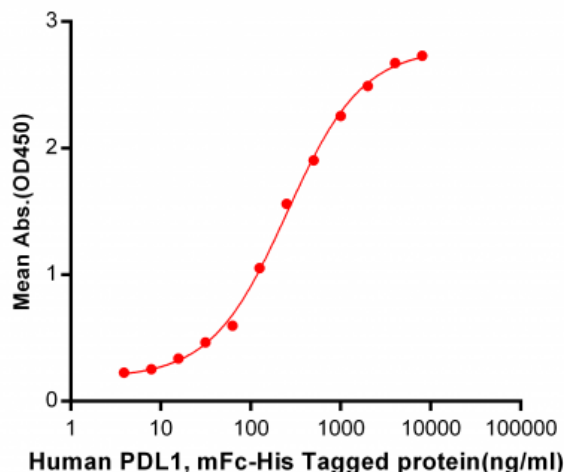


Figure 2. ELISA plate pre-coated by 2 µg/ml (100 µl/well) Human PD1, hFc-His tagged protein (11274) can bind Human PDL1, mFc-His tagged protein 11151 in a linear range of 62.5-251.1 ng/ml.

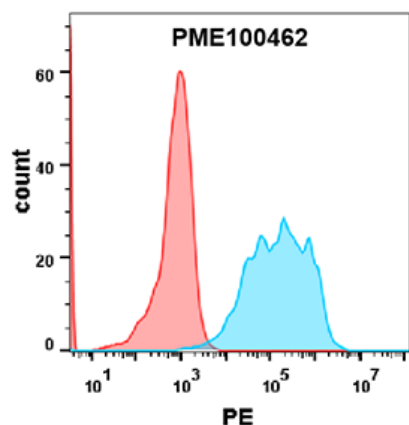


Figure 3. Flow cytometry analysis with 0.2 µg/ml Human PD-1 Protein, hFc-His tag (11274) on Expi293 cells transfected with human PD-L1 (Blue histogram) or Expi293 transfected with irrelevant protein (Red histogram).

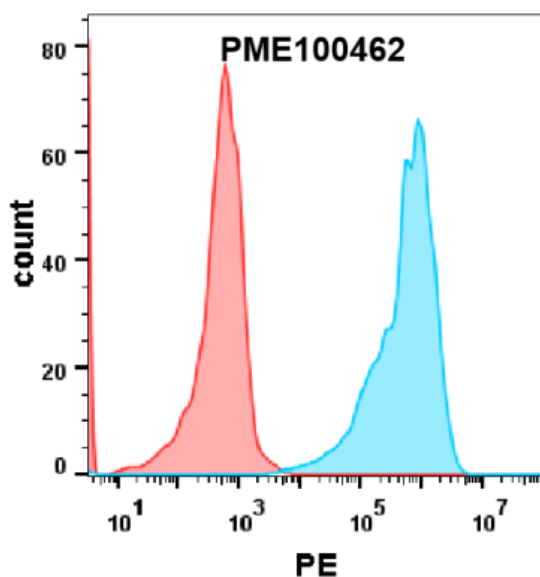


Figure 4. HEK293 cell line transfected with irrelevant protein (red histogram) and human PD-L2 protein (blue histogram) were surface stained with 2ug/ml Human PD-1 Protein, hFc-His tag (11274) followed by PE-conjugated Goat anti-human IgG secondary antibody.