

HUMAN PD-L1 PROTEIN, MFC-HIS TAG

Cat.#: 11151

Product Name: Human PD-L1 Protein

Size: 10 µg, 50 µg and 100 µg

Synonyms: PD-L1;CD274;B7-H1;PDCD1L1;PDCD1LG1

Target: PD-L1

UNIPROT ID: Q9NZQ7

Description: Recombinant human PD-L1 protein with C-terminal mouse Fc and 6xHis tag

Background: This gene encodes an immune inhibitory receptor ligand that is expressed by hematopoietic and non-hematopoietic cells, such as T cells and B cells and various types of tumor cells. The encoded protein is a type I transmembrane protein that has immunoglobulin V-like and C-like domains. Interaction of this ligand with its receptor inhibits T-cell activation and cytokine production. During infection or inflammation of normal tissue, this interaction is important for preventing autoimmunity by maintaining homeostasis of the immune response. In tumor microenvironments, this interaction provides an immune escape for tumor cells through cytotoxic T-cell inactivation. Expression of this gene in tumor cells is considered to be prognostic in many types of human malignancies, including colon cancer and renal cell carcinoma. Alternative splicing results in multiple transcript variants.

Species/Host: HEK293

Molecular Weight: The protein has a predicted molecular mass of 52.3 kDa after removal of the signal peptide.

Molecular Characterization: PD-L1(Phe19-Arg238) mFc(Pro99-Lys330) 6×His tag

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.

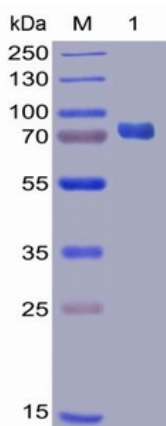


Figure 1. Human PD-L1 Protein, mFc-His Tag on SDS-PAGE under reducing condition.

Human PDL1, mFc-His Tagged protein ELISA

0.2 μ g of Human PDL1, mFc-His Tagged protein per well

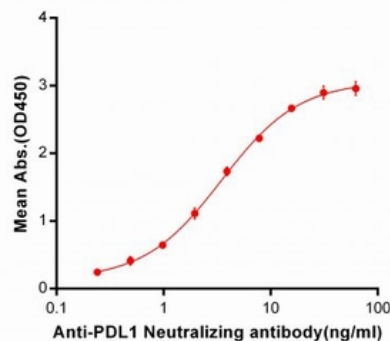


Figure 2. ELISA plate pre-coated by 2 μ g/ml (100 μ l/well) Human PD-L1, mFc-His tagged protein 11151 can bind Anti-PDL1 Neutralizing antibody 28018 in a linear range of 0.24-7.81 ng/ml.

Human PD-L1, mFc-His Tagged protein ELISA

0.2 μ g of PD1, hFc-His Tagged protein per well

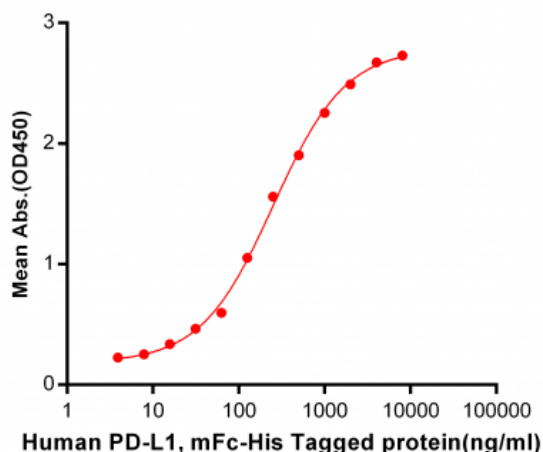


Figure 3. ELISA plate pre-coated by 2 μ g/ml (100 μ l/well) Human PD1, hFc-His tagged protein 11274 can bind Human PDL1, mFc-His tagged protein (11151) in a linear range of 62.5-251.1 ng/ml.

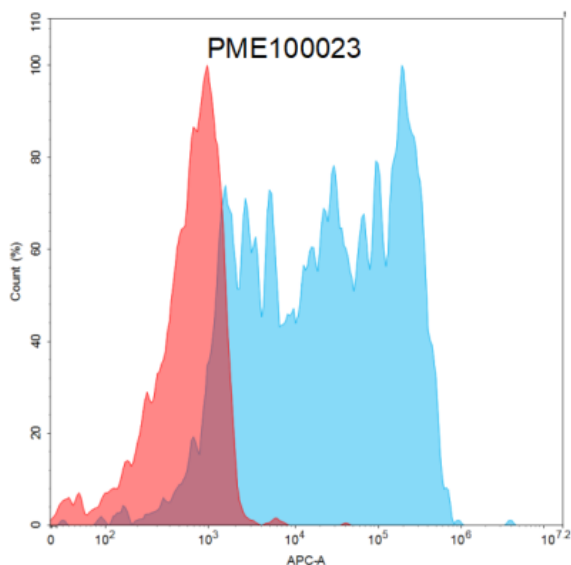


Figure 4. Flow cytometry analysis with 15 μ g/ml Human PD-L1 Protein, mFc-His tag (11151) on Expi293 cells transfected with human PD1 (Blue histogram) or Expi293 transfected with irrelevant protein (Red histogram).