

PRODUCT INFORMATION

Target	PD-1
Synonyms	PDCD1;PD1;CD279;SLEB2
Description	Recombinant human PD-1 protein with C-terminal human Fc and 6×His tag
Delivery	In Stock
Uniprot ID	Q15116
Expression Host	HEK293
Tag	C-Human Fc and 6×His Tag
Molecular Characterization	PD-1(Leu25-Gln167) hFc(Glu99-Ala330) 6×His tag
Molecular Weight	The protein has a predicted molecular mass of 42.9 kDa after removal of the signal peptide.
Purity	The purity of the protein is greater than 90% as determined by SDS-PAGE and Coomassie blue staining.
Formulation & Reconstitution	Lyophilized from sterile PBS, pH 7.4. Normally 5% - 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions of reconstitution.
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.
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.
Usage	Research use only
Conjugate	Unconjugated



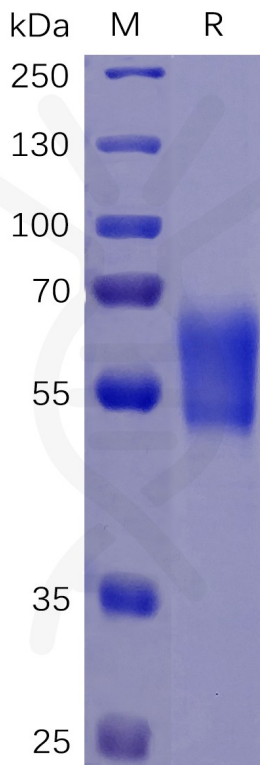


Figure 1. Human PD-1 Protein, hFc-His Tag on SDS-PAGE under reducing condition.

Human PD1, hFc-His Tagged protein ELISA

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

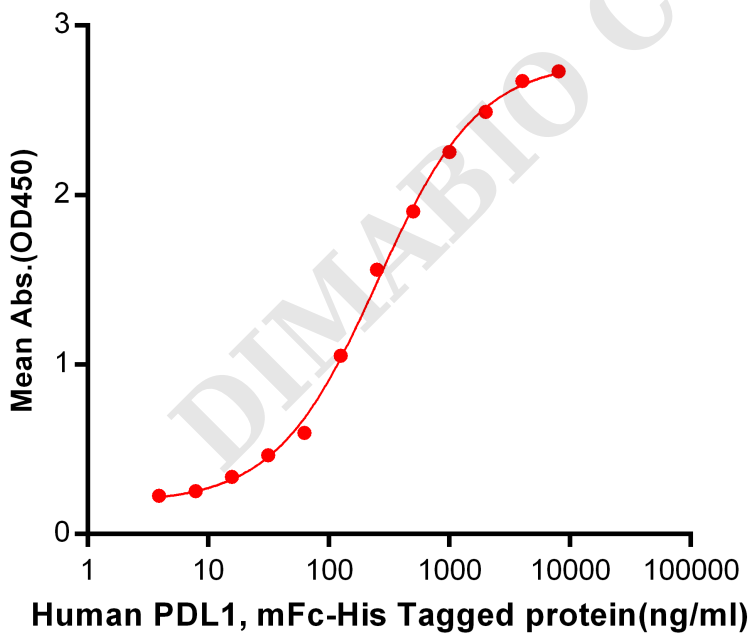


Figure 2. ELISA plate pre-coated by 2 $\mu\text{g}/\text{ml}$ (100 $\mu\text{l}/\text{well}$) Human PD1, hFc-His tagged protein (PME100462) can bind Human PDL1, mFc-His tagged protein PME100023 in a linear range of 62.5-251.1 ng/ml.



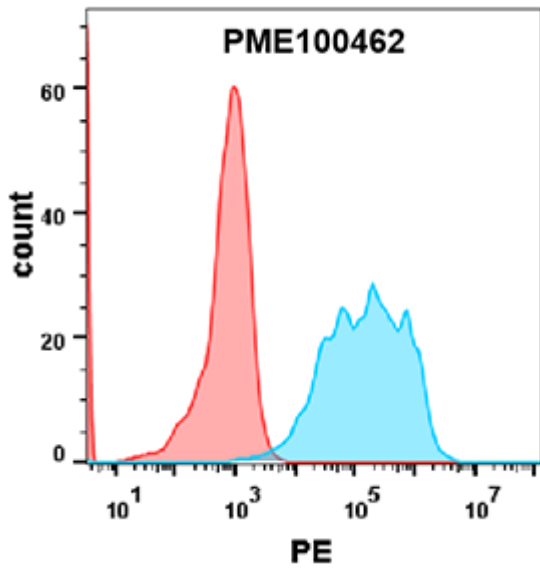


Figure 3. Flow cytometry analysis with 0.2 µg/ml Human PD-1 Protein, hFc-His tag (PME100462) on Expi293 cells transfected with human PD-L1 (Blue histogram) or Expi293 transfected with irrelevant protein (Red histogram).

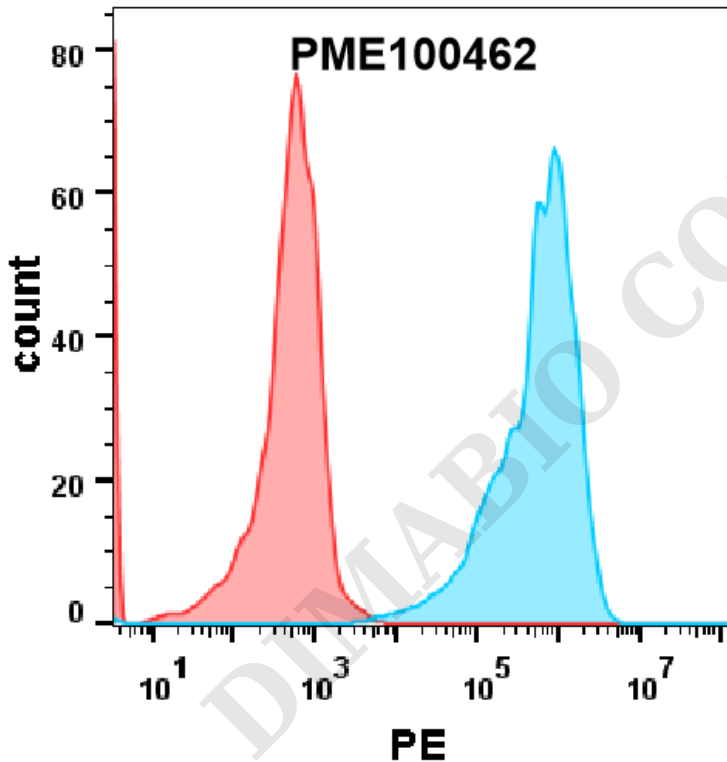


Figure 4. HEK293 cell line transfected with irrelevant protein (red histogram) and human PD-L2 protein (blue histogram) were surface stained with 2 µg/mL Human PD-1 Protein, hFc-His tag (PME100462) followed by PE-conjugated Goat anti-human IgG secondary antibody.

