

## PRODUCT INFORMATION

<b>Target</b>	PD-1
<b>Synonyms</b>	CD279, PD-1, PD1, SLEB2, hPD-1, hPD-I, hSLE1
<b>Description</b>	Recombinant Canine PD-1 protein with C-terminal human Fc tag
<b>Delivery</b>	In Stock
<b>Uniprot ID</b>	NP_001301026.1
<b>Expression Host</b>	HEK293
<b>Tag</b>	C-Human Fc tag
<b>Molecular Characterization</b>	PD-1(Leu25-Gly168) hFc(Glu99-Ala330)
<b>Molecular Weight</b>	The protein has a predicted molecular mass of 42.3 kDa after removal of the signal peptide. The apparent molecular mass of dPD-1-hFc is approximately 55-70 kDa due to glycosylation.
<b>Purity</b>	The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.
<b>Formulation &amp; Reconstitution</b>	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.
<b>Storage&amp;Shipping</b>	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.
<b>Background</b>	Programmed cell death protein 1 (PDCD1) is an immune-inhibitory receptor expressed in activated T cells; it is involved in the regulation of T-cell functions, including those of effector CD8+ T cells. In addition, this protein can also promote the differentiation of CD4+ T cells into T regulatory cells. PDCD1 is expressed in many types of tumors including melanomas, and has demonstrated to play a role in anti-tumor immunity. Moreover, this protein has been shown to be involved in safeguarding against autoimmunity, however, it can also contribute to the inhibition of effective anti-tumor and anti-microbial immunity. [provided by RefSeq, Aug 2020]
<b>Usage</b>	Research use only
<b>Conjugate</b>	Unconjugated



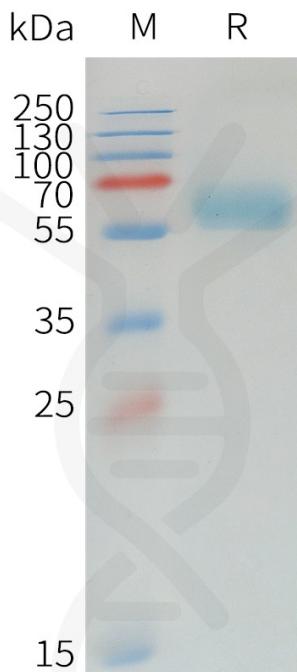
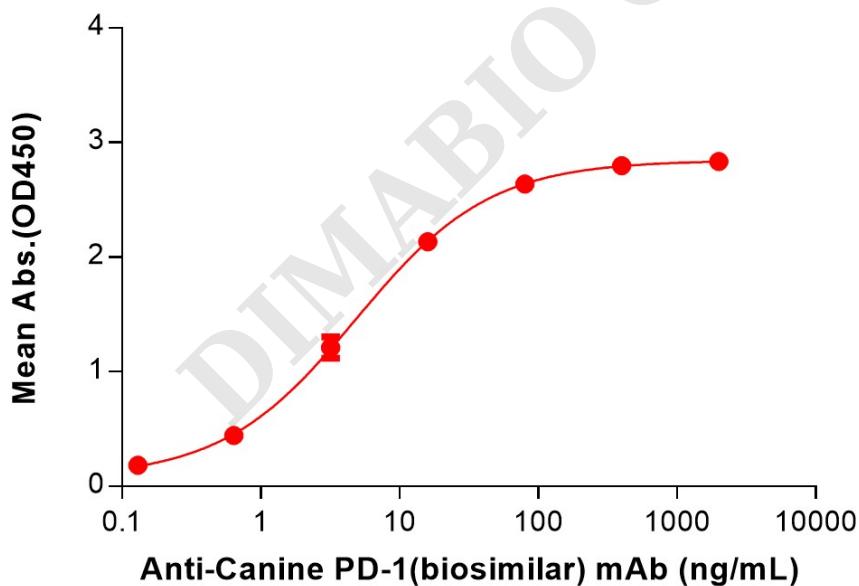


Figure 1. Canine PD-1 Protein, hFc Tag on SDS-PAGE under reducing condition.

### Canine PD-1, hFc Tagged protein ELISA

0.2  $\mu$ g of Canine PD-1, hFc tagged protein per well

Figure 2. ELISA plate pre-coated by 2  $\mu$ g/mL (100  $\mu$ L/well) Canine PD-1 Protein, hFc Tag (PME-D100008) can bind Anti-Canine PD-1(INTERVET 4F12) mAb (BME100202) in a linear range of 0.64–80 ng/mL.

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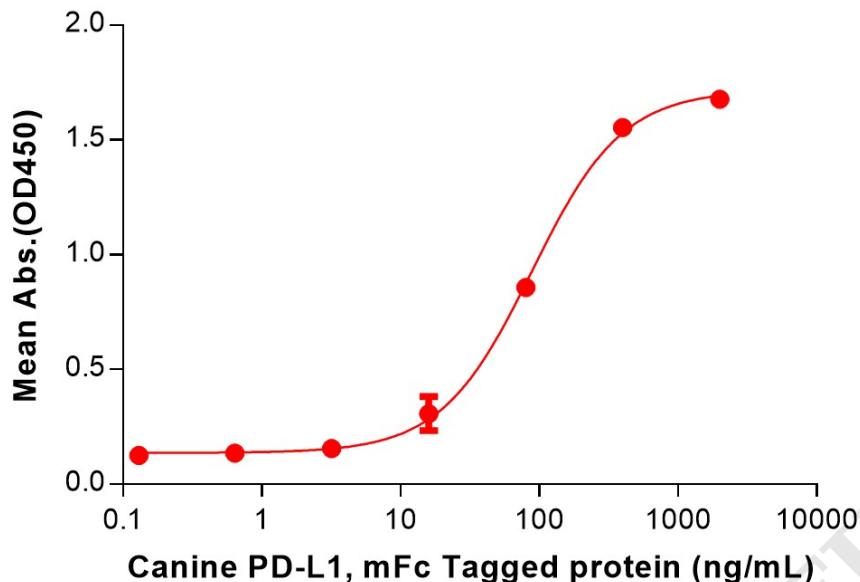


Figure 3. ELISA plate pre-coated by 2  $\mu$ g/mL (100  $\mu$ L/well) Canine PD-1 Protein, hFc Tag (PME-D100008) can bind Canine PD-L1 Protein, mFc Tag (PME-D100007) in a linear range of 16–400 ng/mL.

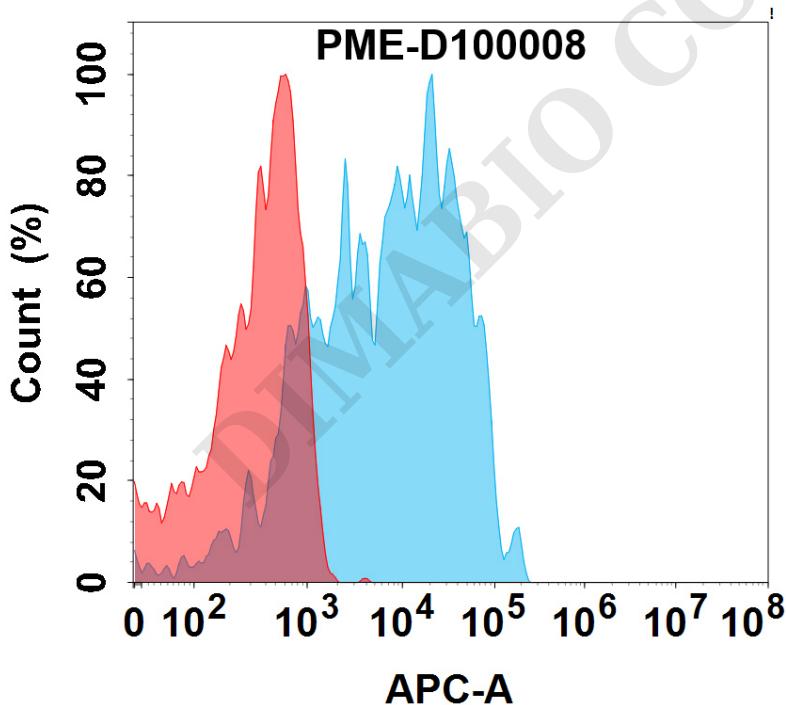


Figure 4. Flow cytometry analysis with 1  $\mu$ g/mL Canine PD-1 Protein, hFc Tag (PME-D100008) on HEK293 cells transfected with Canine PD-L1 protein (Blue histogram) or HEK293 transfected with irrelevant protein (Red histogram).

