

**PRODUCT INFORMATION**

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|---|---|
| <b>Target</b>                           | PD-1  |
| <b>Synonyms</b>                         | PD1; PDCD1; CD279; SLEB2; hPD-1; hPD-I; hSLE1   |
| <b>Description</b>                      | Recombinant Canine PD-1 protein with C-terminal 10×His tag  |
| <b>Delivery</b>                         | In Stock  |
| <b>Uniprot ID</b>                       | NP_001301026.1  |
| <b>Expression Host</b>                  | HEK293  |
| <b>Tag</b>                              | C-10×His tag  |
| <b>Molecular Characterization</b>       | PD-1(Leu25-Gly168) 10×His tag   |
| <b>Molecular Weight</b>                 | The protein has a predicted molecular mass of 17.5 kDa after removal of the signal peptide. The apparent molecular mass of dPD-1-His is approximately 15-35 kDa due to glycosylation.   |
| <b>Purity</b>                           | The purity of the protein is greater than 85% 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  |



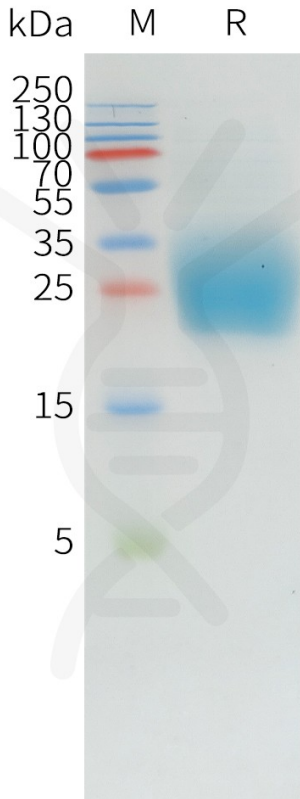


Figure 1. Canine PD-1 Protein, His Tag on SDS-PAGE under reducing condition.

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

0.2 µg of Canine PD-1, His tagged protein per well

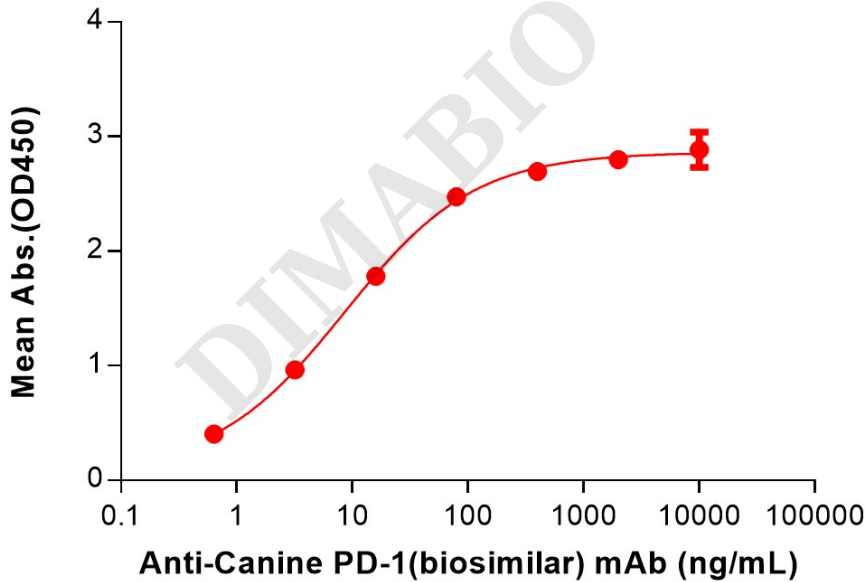


Figure 2. ELISA plate pre-coated by 2 µg/mL (100 µL/well) Canine PD-1 Protein, His Tag (PME-D100005) can bind Anti-Canine PD-1 (INTERVET 4F12) mAb (BME100202) in a linear range of 0.64–80 ng/mL.



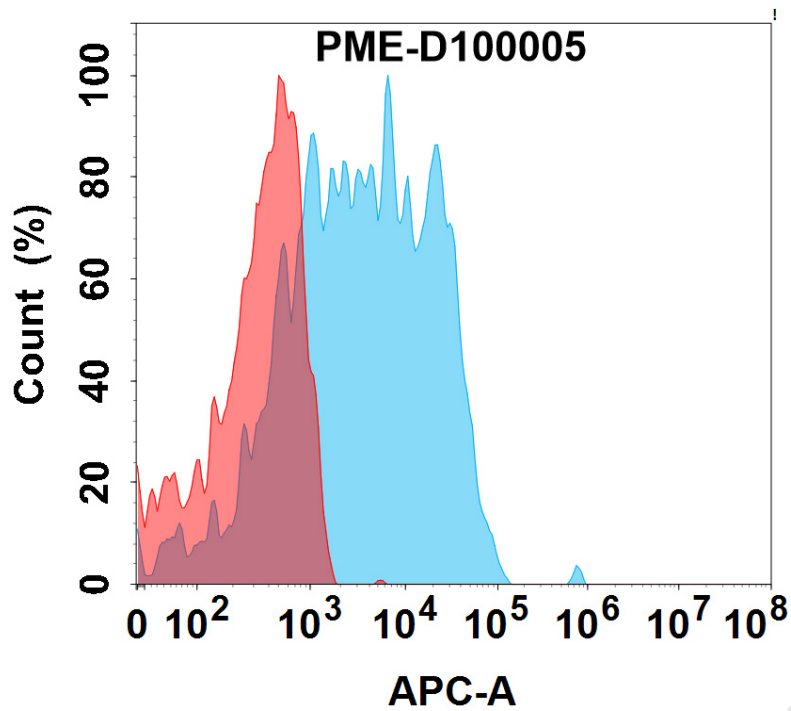


Figure 3. Flow cytometry analysis with 15µg/mL Canine PD-1 Protein, His Tag(PME-D100005) on Expi293 cells transfected with Canine PD-L1 protein (Blue histogram) or Expi293 transfected with irrelevant protein (Red histogram).

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