

## 32-18516: Canine PD-1 Protein, hFc Tag

**Uniprot ID :** NP\_001301026.1

**Alternative Name :** CD279, PD-1, PD1, SLEB2, hPD-1, hPD-I, hSLE1

### Description

**Description :** Recombinant Canine PD-1 protein with C-terminal human Fc tag

**Background :** 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.

**Molecular Characterization:** 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.

**Tag :** C-Human Fc tag

### Product Info

**Amount :** 50 µg / 100 µg

**Purification :** The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.

**Content :** Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8% trehalose is added as protectants before lyophilization.

**Storage condition :** 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.

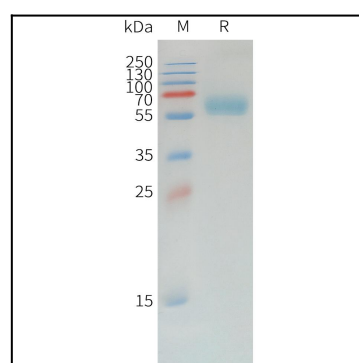


Figure 1. Canine PD-1 Protein, hFc Tag on SDS-PAGE under reducing condition.

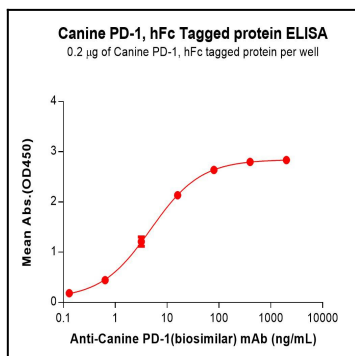


Figure 2. ELISA plate pre-coated by 2  $\hat{1}$ /<sub>4</sub>g/mL (100  $\hat{1}$ /<sub>4</sub>L/well) Canine PD-1 Protein, hFc Tag can bind Anti-Canine PD-1(INTERVET 4F12) mAb in a linear range of 0.64-80 ng/mL.

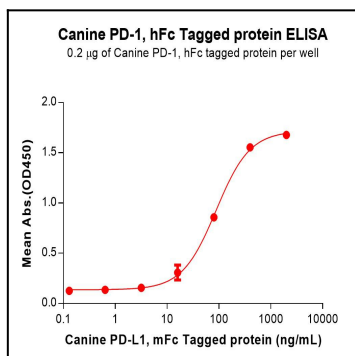


Figure 3. ELISA plate pre-coated by 2  $\hat{1}$ /<sub>4</sub>g/mL (100  $\hat{1}$ /<sub>4</sub>L/well) Canine PD-1 Protein, hFc Tag can bind Canine PD-L1 Protein, mFc Tag in a linear range of 16-400 ng/mL.

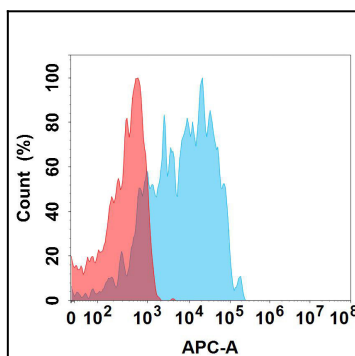


Figure 4. Flow cytometry analysis with 1  $\hat{1}$ /<sub>4</sub>g/mL Canine PD-1 Protein, hFc Tag on Expi293 cells transfected with Canine PD-L1 protein (Blue histogram) or Expi293 transfected with irrelevant protein (Red histogram).