

# Canine PD-1/PDCD1 Protein

Cat. No. PD1-DM201



## Description

<b>Source</b>	Recombinant Canine PD-1/PDCD1 Protein is expressed from HEK293 with hFc tag at the C-terminus. It contains Leu25-Val170.
<b>Accession</b>	NP_001301026.1
<b>Molecular Weight</b>	The protein has a predicted MW of 43.00 kDa. Due to glycosylation, the protein migrates to 55-70 kDa based on Tris-Bis PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

## Formulation and Storage

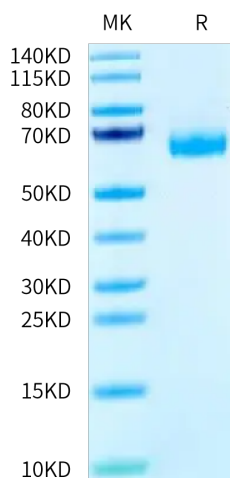
<b>Formulation</b>	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Programmed cell death protein 1, also known as PD-1 and CD279, is a protein found on the surface of cells that has a role in regulating the immune system's response to the cells of the human body by down-regulating the immune system and promoting self tolerance by suppressing T cell inflammatory activity.

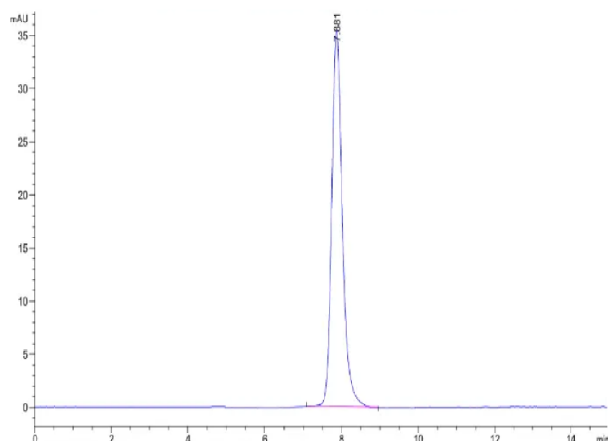
## Assay Data

### Tris-Bis PAGE



Canine PD-1 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC



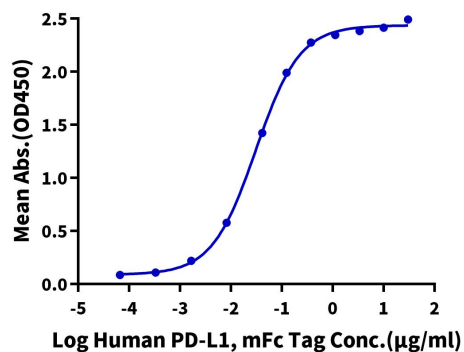
The purity of Canine PD-1 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

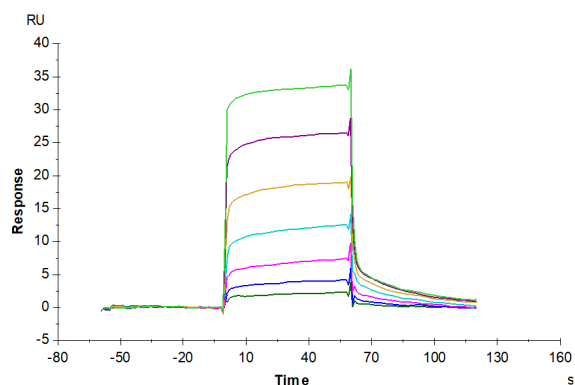
**Canine PD-1, hFc Tag ELISA**

0.1µg Canine PD-1, hFc Tag Per Well



Immobilized Canine PD-1, hFc Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Human PD-L1, mFc Tag with the EC50 of 30.7ng/ml determined by ELISA (QC Test).

SPR Data



Canine PD-1, hFc Tag captured on CM5 Chip via ProtienA can bind Human PD-L1, His Tag with an affinity constant of 0.696 µM as determined in SPR assay (Biacore T200).