

## Recombinant Rabbit PDCD1 protein, Fc-tagged

Cat. No. PDCD1-372R Lot. No. (See product label)

### SPECIFICATION

**Product Overview** Recombinant Rabbit PDCD1 protein (Leu25-Gln167), fused to human IgG1 Fc tag at C-terminus, was expressed in human 293 cells (HEK293).

**Species** Rabbit

**Source** HEK293

**ProteinLength** 143

#### Description

Programmed cell death protein 1 (PD-1) is also known as CD279 and PDCD1, is a type I membrane protein and is a member of the extended CD28/CTLA-4 family of T cell regulators. PDCD1 is expressed on the surface of activated T cells, B cells, macrophages, myeloid cells and a subset of thymocytes. PD-1 has two ligands, PD-L1 and PD-L2, which are members of the B7 family. PD-L1 is expressed on almost all murine tumor cell lines, including PA1 myeloma, P815 mastocytoma, and B16 melanoma upon treatment with IFN- $\gamma$ . PD-L2 expression is more restricted and is expressed mainly by DCs and a few tumor lines. PD1 inhibits the T-cell proliferation and production of related cytokines including IL-1, IL-4, IL-10 and IFN- $\gamma$  by suppressing the activation and transduction of PI3K/AKT pathway. In addition, coligation of PD1 inhibits BCR-mediated signal by dephosphorylating key signal transducer. In vitro, treatment of anti-CD3 stimulated T cells with PD-L1-Ig results in reduced T cell proliferation and IFN- $\gamma$  secretion. Monoclonal antibodies targeting PD-1 that boost the immune system are being developed for the treatment of cancer.

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<b>Form</b>	Lyophilized from 0.22 um filtered solution in Tris with Glycine, Arginine and NaCl, pH7.5, 10% trehalose.
<b>Molecular Mass</b>	The protein has a calculated MW of 42.6 kDa. The protein migrates as 55-66 kDa under reducing (R) condition (SDS-PAGE).
<b>Endotoxin</b>	Less than 1.0 EU per ug by the LAL method.
<b>Purity</b>	>95% as determined by SDS-PAGE.
<b>Storage</b>	<p>For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower.</p> <p>Please avoid repeated freeze-thaw cycles.</p> <p>This product is stable after storage at:</p> <ul style="list-style-type: none"> <li>-20 centigrade to -70 centigrade for 12 months in lyophilized state;</li> <li>-70 centigrade for 3 months under sterile conditions after reconstitution.</li> </ul>
<b>Reconstitution</b>	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4°C before opening to recover the entire contents.

## GENE INFORMATION

<b>Gene Name</b>	PDCD1
<b>Official Symbol</b>	PDCD1
<b>Synonyms</b>	CD279, PD-1, PD1, SLEB2, hPD-1, hPD-I, hSLE1
<b>Gene ID</b>	100343779
<b>mRNA Refseq</b>	XM_017339811.1

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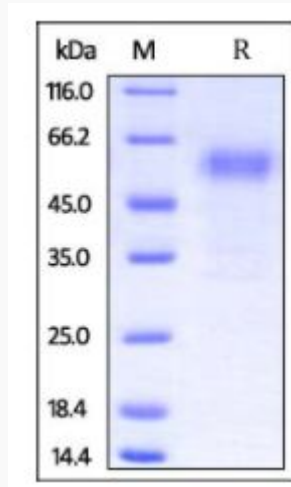
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**Protein Refseq**      XP\_017195300.1

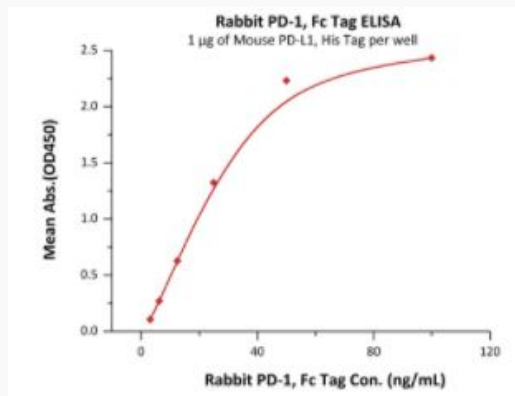
**UniProt ID**          G1SUFO

**SDS-PAGE of  
PDCD1-372R**



Rabbit PD-1, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

**Bioactivity-ELISA of  
PDCD1-372R**



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Immobilized Mouse PD-L1, His Tag at 10 µg/mL (100 µL/well) can bind Rabbit PD-1, Fc Tag with a linear range of 3-50 ng/mL (QC tested).

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