



## PDCD1 Recombinant Protein

CATALOG NUMBER: 92-688

### Specifications

<b>SPECIES:</b>	Cynomolgus monkey
<b>SOURCE SPECIES:</b>	Human Cells
<b>SEQUENCE:</b>	Pro21-Gln167
<b>FUSION TAG:</b>	C-6 His tag
<b>APPLICATIONS:</b>	This recombinant protein can be used for biological assays. For research use only.

### Properties

<b>PURITY:</b>	Greater than 95% as determined by reducing SDS-PAGE. Endotoxin level less than 0.1 ng/ug (1 IEU/ug) as determined by LAL test.
<b>PREDICTED MOLECULAR WEIGHT:</b>	17.3 kD
<b>PHYSICAL STATE:</b>	Lyophilized
<b>BUFFER:</b>	Lyophilized from a 0.2 um filtered solution of PBS, pH7.4. It is not recommended to reconstitute to a concentration less than 100 ug/ml. Dissolve the lyophilized protein in ddH <sub>2</sub> O.
<b>STORAGE CONDITIONS:</b>	Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.

### Additional Info

<b>ALTERNATE NAMES:</b>	Programmed cell death 1, PD-1, PD1, CD279
<b>ACCESSION NO.:</b>	B0LAJ3

### Background

Programmed cell death protein 1 (PDCD1) is a single-pass type I membrane protein and contains 1 Ig-like V-type domain. PD-1 is a member of the extended CD28/CTLA-4 family of T cell regulators. PDCD1 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 PDCD1 inhibits BCR-mediating signal by dephosphorylating key signal transducer. PDCD1 has been suggested to be involved in lymphocyte clonal selection and peripheral tolerance, and thus contributes to the prevention of autoimmune diseases. As a cell surface molecule, PDCD1 regulates the adaptive immune response. Engagement of PD-1 by its ligands PD-L1 or PD-L2 transduces a signal that inhibits T-cell proliferation, cytokine production, and cytolytic function.

**FOR RESEARCH USE ONLY**

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