

## Human CellExp™ PD-1 /PDCD1, C-Fc Tag, mouse recombinant

**CATALOG #:** 7503-10 10 µg  
7503-50 50 µg

**ALTERNATE NAMES:** PDCD1, PD1, CD279, SLEB2, hPD-1, hPD-I

**SOURCE:** HEK 293 cells (Ser 21 – Gln 167)

**PURITY:** ≥ 92% by SDS-PAGE gel

**MOL. WEIGHT:** This protein is fused with a human IgG1 Fc tag at the C-terminus, and has a calculated MW of 43.2 kDa. The predicted N-terminus is Ser 21. DTT-reduced Protein migrates as 60-66 kDa in SDS-PAGE due to glycosylation.

**ENDOTOXIN LEVEL:** <1 EU/µg by LAL method

**FORM:** Lyophilized

**FORMULATION:** Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 100 mM glycine, pH 7.5. Normally Mannitol or Trehalose is added as protectants before lyophilization.

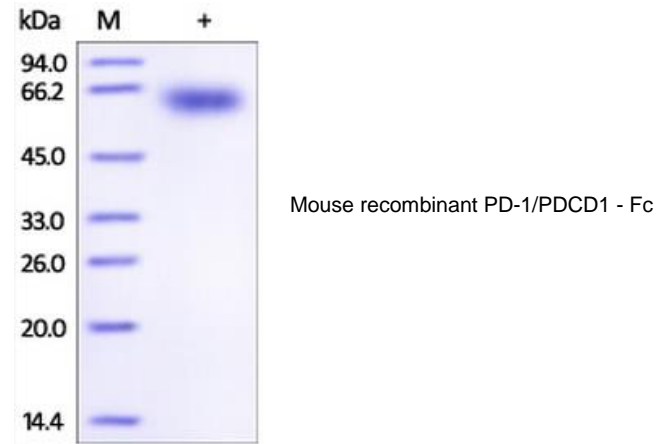
**STORAGE CONDITIONS:** Store at -20°C. After reconstitution, aliquot and store at -20°C or -70°C for up to 3 months. Avoid repeated freezing and thawing cycles.

**RECONSTITUTION:** Centrifuge the vial prior to opening. Reconstitute in PBS, pH 7.4. Do not vortex.

**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-γ. 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-γ 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-γ secretion. Monoclonal antibodies targeting PD-1 that

boost the immune system are being developed for the treatment of cancer. This protein is suitable for use in protein studies such as protein structure analysis and protein-protein interactions. It can also be used as an immunogen, as a protein standard, or in cell biology research applications.

**BIOLOGICAL ACTIVITY:** Measured by its binding ability in a functional ELISA. Immobilized recombinant mouse PD-1 /PDCD1 Fc Chimera at 2 µg/mL (100 µl/well) can bind biotinylated Mouse PD-L1 with a linear range of 32 - 500 ng/mL.



**RELATED PRODUCTS:**

- Human CellExp™ PD-1 /PDCD1, human recombinant (Cat. No. 7498-10, -50)
- Human CellExp™ PD-1 /PDCD1, mouse recombinant (Cat. No. 7499-10, -50)
- Human CellExp™ PD-1 /PDCD1, C-Fc Tag, human recombinant (Cat. No. 7500-10, -50)
- Human CellExp™ PD-1, Fc Tag, Biotinylated, human recombinant (Cat. No. 7502-10, -50)
- PD-1/PDCD1 Antibody (Cat # 6931-50)
- Human CellExp™ PD-L1 /CD274, human recombinant (Cat. No. 7429-10, -50)
- Human CellExp™ CD223, human recombinant (Cat. No. 7278-10, -50)
- Human CellExp™ CD71, human recombinant (Cat. No. 7279-10, -50)
- Human CellExp™ CD273, human recombinant (Cat. No. 7369-10, -50)
- Human CellExp™ CD33, human recombinant (Cat. No. 7370-10, -50)
- Human CellExp™ CD36, human recombinant (Cat. No. 7371-10, -50)
- Human CellExp™ CD87, human recombinant (Cat. No. 7372-20, -100)

**FOR RESEARCH USE ONLY! Not to be used in humans.**

