

## Human CellExp™ Biotinylated PD-1 / PDCD1, His Tag & Fc Tag, human recombinant

<b>CATALOG #:</b>	7877-5	5 µg
<b>ALTERNATE NAMES:</b>	PDCD1, PD1, CD279, SLEB2, hPD-1, hPD-I	
<b>SOURCE:</b>	HEK 293 cells (Leu 25 – Gln 167)	
<b>PURITY:</b>	≥ 95% by SDS-PAGE gel	

**MOL. WEIGHT:** Biotinylated Human PD-1, His Tag & Fc tag is fused with polyhistidine tagged human IgG1 Fc fragment at the C-terminus, and has a calculated MW of 44.4 kDa. The predicted N-terminus is Leu 25. DTT-reduced Protein migrates as 50-66 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 PBS, pH 7.4. 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.

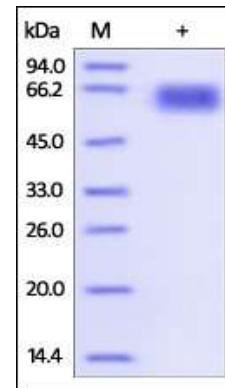
**RECONSTITUTION:** Centrifuge the vial prior to opening. Reconstitute in PBS, pH 7.4. Do not vortex.

**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.

The Biotinylated Human PD-1 / PDCD1 Protein, His Tag & Fc Tag was produced using proprietary single-point enzymatic biotinlabeling technology at C-terminus to retain its native conformational structure and, therefore, bioactivity, and has been used successfully for high sensitivity and low variability assays, such as ELISA, western blotting, inhibition assay, pull-down, SPR, FACS, and affinity purification, together with anti-biotin antibody, streptavidin or avidin-conjugated probes.

**BIOLOGICAL ACTIVITY:** Measured by its binding ability in a functional ELISA. Immobilized Human PD-L1, Fc Tag at 5 µg/mL (100 µl/well), can bind Biotinylated Human PD-1, His Tag & Fc Tag with a linear range of 0.01-0.1 µg/mL.



The purity of Biotinylated Human PD-1, His Tag & Fc tag was determined by DTT-reduced (+) SDS-PAGE and staining overnight with Coomassie Blue.

### 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 /PDCD1, C-Fc Tag, mouse recombinant (**Cat. No. 7501-10, -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.**