

Human CellExp™ PD-1/PDCD1, C-Fc+His Tag, human recombinant

CATALOG #:	P1264-10	10 µg
	P1264-50	50 µg
ALTERNATE NAMES:	PDCD1, PD1, CD279, SLEB2, hPD-1, hPD-I	
SOURCE:	HEK 293 cells (Leu 25 - Gln 167)	
PURITY:	≥ 95% by SDS-PAGE gel	

MOL. WEIGHT: This protein is fused to the Fc fragment of human IgG1 and 6x His tag at the C-terminus and has a calculated MW of 44 kDa. The protein migrates as 53-60 kDa under reducing conditions (SDS-PAGE) due to glycosylation.

Human PD-1 (Leu25-Gln167) UniProtKB - Q15116	TEV site ENLYFQG	Human IgG ₁ (Fc-Tag)	6x His Tag
N-terminus			C-terminus

FORM: Lyophilized

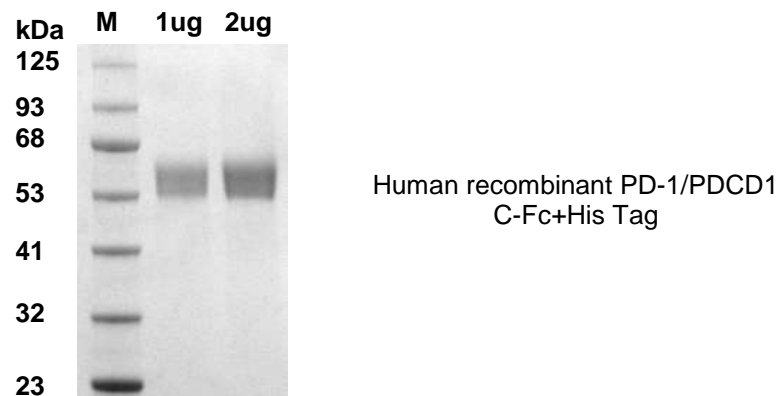
FORMULATION: Lyophilized from 0.22 µm filtered PBS pH 7.4. Trehalose (5%) was added as a protectant prior to lyophilization.

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 blocking PD-1 interaction with PD-L1/2 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.



RELATED PRODUCTS:

- Human CellExp™ PD-1 /PDCD1, mouse recombinant (**Cat. No. 7499-10, -50**)
- Human CellExp™ PD-1 /PDCD1, mouse recombinant (**Cat. No. P1086-10, -50**)
- Human CellExp™ PD-1 /PDCD1, C-Fc Tag, mouse recombinant (**Cat. No. 7503-10, -50**)
- PD-1/PDCD1, human recombinant (**Cat. No. P1024-10, -50**)
- Biotinylated PD-1/PDCD1, human recombinant (**Cat. No. P1038-10, -50**)
- Human CellExp™ PD-1 /PDCD1, C-Fc Tag, human recombinant (**Cat. No. 7500-10, -50**)
- Anti-PD-1 Antibody (**Cat. No. A1384-30T, -100**)
- Anti-PD-1 (Pembrolizumab), Humanized Antibody (**Cat. No. A1306-100**)
- Anti-PD-1 (Nivolumab), Humanized Antibody (**Cat. No. A1307-100**)
- PD-1/PDCD1 Antibody (**Cat. No. 6931-50**)
- Human CellExp™ PD-L1 /CD274, human recombinant (**Cat. No. 7429-10, -50**)
- PD-1 (Human) Elisa Kit (**Cat. No. K4153-100**)
- PD-1/PD-L1 Inhibitor 2 (**Cat. No. B1050-5, -25**)
- BioSim™ anti-Pembrolizumab (Keytruda®) (Human) ELISA Kit (**Cat. No. E4397-100**)
- BioSim™ anti-Nivolumab (Opdivo®) (Human) ELISA Kit (**Cat. No. E4397-100**)
- BioSim™ Pembrolizumab (Keytruda®) (Human) ELISA Kit (**Cat. No. E4383-100**)
- BioSim™ Nivolumab (Opdivo®) (Human) ELISA Kit (**Cat. No. E4382-100**)

FOR RESEARCH USE ONLY! Not to be used in humans