
Human CellExp Biotinylated PD-1 / PDCD1, C-Fc Tag, human recombinant protein
PDCD1, PD1, CD279, SLEB2, hPD-1, hPD-I
Catalog # PBV11123r**Specification**

Human CellExp Biotinylated PD-1 / PDCD1, C-Fc Tag, human recombinant protein - Product infoPrimary Accession
Calculated MW[Q15116](#)

Biotinylated rhPDCD1 Fc Chimera, fused with Fc fragment of human IgG1 at the C-terminus, has a calculated MW of 42.6 kDa. The predicted N-terminus is Pro 21. DTT-reduced Protein migrates as 50 kDa due to glycosylation. The primary amine of biotinylated rhPDCD1 Fc Chimera was labeled by biotin for detection in ELISA, dot blot or western blot using streptavidin or avidin-conjugated probes. KDa

Human CellExp Biotinylated PD-1 / PDCD1, C-Fc Tag, human recombinant protein - Additional InfoGene ID
Gene Symbol
Other Names
PDCD1, PD1, CD279, SLEB2, hPD-1, hPD-I5133
PDCD1Gene Source
Source
Assay&Purity
Assay2&Purity2
Recombinant
Results

Human
HEK293 cells
SDS-PAGE; ≥95%
N/A;
Yes
Measured by its binding ability in a functional ELISA. Immobilized rh PD-L1 / B7-H1 Fc Chimera at 2 µg/ml (100 µl/well) can bind biotinylated rhPDCD1 Fc Chimera with a linear range of 0.2- 2 µg/ml when detected by HRP*-Labeled Streptavidin.

Target/Specificity
PD-1/PDCD1**Application Notes**

Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

Format
Lyophilized**Storage**

-20°C; Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally Mannitol or Trehalose is added as protectants before lyophilization.

Human CellExp Biotinylated PD-1 / PDCD1, C-Fc Tag, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Human CellExp Biotinylated PD-1 / PDCD1, C-Fc Tag, human recombinant protein - Images

Human CellExp Biotinylated PD-1 / PDCD1, C-Fc Tag, human recombinant protein - Background

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-mediating 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.

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Finger L.R.,et al.Gene 197:177-187(1997).
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Prokunina L.,et al.Nat. Genet. 32:666-669(2002).
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