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

PDCD1, PD1, CD279, SLEB2, hPD-1, hPD-l
Catalog # PBV11121r

Specification

Human CellExp PD-1 /PDCD1, C-Fc Tag, human recombinant protein - Product info

Primary Accession	Q15116
Calculated MW	**This protein 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 50-66 kDa due to glycosylation. KDa**

Human CellExp PD-1 /PDCD1, C-Fc Tag, human recombinant protein - Additional Info

Gene ID	**5133**
Gene Symbol	**PDCD1**

Other Names
PDCD1, PD1, CD279, SLEB2, hPD-1, hPD-l

Gene Source	**Human**
Source	**HEK293 cells**
Assay&Purity	**SDS-PAGE; ≥95%**
Assay2&Purity2	**N/A;**
Recombinant	**Yes**
Results	**Measured by its binding ability in a functional ELISA. Immobilized human PD1, c-Fc Protein at 2 μg/ml can bind PD-L1, c-Fc Tag with a linear range of 0.05-0.5 μg/ml**

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 50 mM Tris, 100 mM glycine, pH 7.5. Normally Mannitol or Trehalose is added as protectants before lyophilization.

Human CellExp 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 Cytomety
- Cell Culture

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

Human CellExp 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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Prokunina L.,et al.Nat. Genet. 32:666-669(2002).
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