

# Active Recombinant Mouse Pdcd1 Protein, Mouse IgG2a Fc Tagged

**Cat. No.** Pdcd1-11185M    **Lot. No.** (See product label)

## SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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| <b>Product Overview</b> | Mouse PD-1 Protein, Mouse IgG2a Fc Tag is expressed from human 293 cells (HEK293). It contains AA Leu 25-Gln 167 (Accession # Q02242-1). This protein carries a mouse IgG2a Fc tag at the C-terminus. Predicted N-terminus: Leu 25                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Species</b>          | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Source</b>           | HEK293                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>ProteinLength</b>    | 25-167 aa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Description</b>      | <p>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-</p> |

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|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       | 1 that boost the immune system are being developed for the treatment of cancer.                                                                                                                                                                                                                                              |
| <b>Form</b>           | Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.                                                                                                                                                                                                                                       |
| <b>Bio-activity</b>   | Immobilized Mouse PD-L1, Fc Tag at 5 µg/mL (100 µL/well) can bind Mouse PD-1 Protein, Mouse IgG2a Fc Tag with a linear range of 0.008-0.25 µg/mL.                                                                                                                                                                            |
| <b>Molecular Mass</b> | The protein has a calculated MW of 43.0 kDa. The protein migrates as 57-65 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.                                                                                                                  |
| <b>Endotoxin</b>      | Less than 0.1 EU/µg by the LAL method/rFC method.                                                                                                                                                                                                                                                                            |
| <b>Purity</b>         | >90% as determined by SDS-PAGE. >90% as determined by SEC-MALS.                                                                                                                                                                                                                                                              |
| <b>Storage</b>        | This product is stable after storage at: -20 to -70 centigrade for 12 months in lyophilized state; -70 centigrade for 3 months under sterile conditions after reconstitution. For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower. Please avoid repeated freeze-thaw cycles. |
| <b>Reconstitution</b> | It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 µg/µL. Centrifuge the vial at 4 centigrade before opening to recover the entire contents.                                                                                                                                       |

## GENE INFORMATION

|                        |                                                                                 |
|------------------------|---------------------------------------------------------------------------------|
| <b>Gene Name</b>       | Pdcd1 programmed cell death 1 [ Mus musculus (house mouse) ]                    |
| <b>Official Symbol</b> | Pdcd1                                                                           |
| <b>Synonyms</b>        | PDCD1; programmed cell death 1; programmed cell death protein 1; mPD-1; protein |

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PD-1; PD-1; Pdc1; Ly101;

**Gene ID** 18566**mRNA Refseq** NM\_008798**Protein Refseq** NP\_032824**UniProt ID** Q02242 Tel: 1-631-559-9269 1-516-512-3133 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127 45-1 Ramsey Road, Shirley, NY 11967, USA