

Recombinant Mouse Pdcd1, Fc tagged, Biotinylated

Cat. No. Pdcd1-205M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Biotinylated Mouse PD1 /PDCD1 Protein,C-Fc Tag (Biotinylated Mouse PDCD1 /PD1 Fc Chimera) Ser 21 - Gln 167 (Accession # NP_032824) was produced in human 293 cells (HEK293).
Species	Mouse
Source	HEK293
ProteinLength	21-167 a.a.
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-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.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Form	Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally Mannitol or Trehalose are added as protectants before lyophilization.
Molecular Mass	Biotinylated Mouse PDCD1 /PD1 Fc Chimera is fused with a human IgG1 Fc tag at the C-terminus, and has a calculated MW of 43.2 kDa. The predicted N-terminus is Ser 21. DTT-reduced Protein migrates as 60-66 kDa in SDS-PAGE due to glycosylation.
Endotoxin	Less than 1.0 EU per µg of the Biotinylated Mouse PDCD1 /PD1 Fc Chimera by the LAL method.
Purity	>92% as determined by SDS-PAGE.
Storage	Avoid repeated freeze-thaw cycles.No activity loss was observed after storage at:In lyophilized state for 1 year (4oC); After reconstitution under sterile conditions for 3 months (-70oC).
Reconstitution	See Certificate of Analysis for reconstitution instructions and specific concentrations.
Conjugation	Biotin

GENE INFORMATION

Gene Name	Pdc1 programmed cell death 1 [<i>Mus musculus</i>]
Official Symbol	Pdc1
Synonyms	PDCD1; programmed cell death 1; programmed cell death protein 1; mPD-1; protein PD-1; PD-1; Pdc1; Ly101;
Gene ID	18566

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

mRNA Refseq	NM_008798
Protein Refseq	NP_032824
Pathway	Adaptive Immune System, organism-specific biosystem; Cell adhesion molecules (CAMs), organism-specific biosystem; Cell adhesion molecules (CAMs), conserved biosystem; Costimulation by the CD28 family, organism-specific biosystem; Immune System, organism-specific biosystem; PD-1 signaling, organism-specific biosystem; T cell receptor signaling pathway, organism-specific biosystem;
Function	protein binding;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA