

PD-1 Recombinant Protein | PDCD1 recombinant protein

PD-1 Protein, Mouse, Recombinant (ECD, His Tag)

CATALOG #
AAA258130

HOST
HEK293 Cells

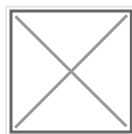
PRODUCT SYNONYMS

PD-1; PD-1 Protein; Mouse; Recombinant (ECD; His Tag); Mouse PD1/PDCD1 Protein (ECD; Ly101 Protein; Pdc1 Protein; programmed cell death 1; PDCD1 recombinant protein

PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	≥95% as determined by SDS-PAGE. ≥95% as determined by SEC-HPLC
Form/Format	Lyophilized from sterile PBS, pH7.4. Normally 5% trehalose, 5% mannitol
Sequence	Met1-Gln167
Species	Mouse
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Leu 25
Tag	C-His
Protein Construction	A DNA sequence encoding the extracellular domain (Met 1-Gln 167) of mouse PDCD1 (NP_032824.1) precursor was expressed with a polyhistidine tag at the C-terminus.
Reconstitution	It is recommended that sterile water (400ul) be added to the vial to prepare a stock solution of 0.25mg/ml. Concentration is measured by UV
Bio Activity	Measured by its ability to bind PD-L1 Protein, Mouse, Recombinant (ECD, hFc Tag) in a functional ELISA.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20°C to -80°C. Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage. Avoid repeated freeze-thaw cycles.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for PDCD1 recombinant protein	Background: Programmed cell death 1, also known as PDCD1, is a type I transmembrane glycoprotein, and is an immunoreceptor belonging to the CD28/CTLA-4 family negatively regulates antigen receptor signaling by recruiting protein tyrosine phosphatase, SHP-2 upon interacting with either of two ligands, PD-L1 or PD-L2. PD1 inhibits the T-cell proliferation and production of related cytokines including IL-1, IL-4, IL-10 and IFN-gamma by suppressing the activation and transduction of PI3K/AKT pathway. In addition, coligation of PD1 inhibits BCR-mediating signal by dephosphorylating key signal transducer. PD1 has been suggested to be involved in lymphocyte clonal selection and peripheral tolerance, and thus contributes to the prevention of autoimmune diseases. Furthermore, PD1 is shown to be a regulator of virus-specific CD8+ T cell survival in HIV infection. As a cell surface molecule, PDCD1 regulates the adaptive immune response. Engagement of PD-1 by its ligands PD-L1 or PD-L2 transduces a signal that inhibits T-cell proliferation, cytokine production, and cytolytic function.
Product Categories/Family for PDCD1 recombinant protein	ITIM/ITAM Immunoreceptors and Related Molecules Cancer Drug Targets
References	James ES, et al. (2005) PDCD1: a tissue-specific susceptibility locus for inherited inflammatory disorders. Genes Immun. 6(5): 430-7.Okazaki T, et al. (2007) PD-1 and PD-1 ligands: from discovery to clinical application. Int Immunol. 19(7): 813-24.del Rio ML, et al. (2008) PD-1/PD-L1, PD-1/PD-L2, and other co-inhibitory signaling pathways in transplantation. Transpl Int. 21(11): 1015-28.Riley JL.(2009) PD-1 signaling in primary T cells. Immunol Rev. 229(1): 114-25.

NCBI AND UNIPROT INFORMATION

NCBI GI #	6679239
NCBI GeneID	18566
NCBI Accession #	NP_032824.1
NCBI GenBank Nucleotide #	NM_008798.2
UniProt Accession #	Q02242
Molecular Weight	The secreted recombinant mouse PDCD1 consists of 154 amino acids and has a predicted molecular mass of 17.6 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of mouse PDCD1 is approximately 40-45 kDa due to glycosylation.
NCBI Official Full Name	programmed cell death protein 1
NCBI Official Synonym Full Names	programmed cell death 1
NCBI Official Symbol	Pdcd1
NCBI Official Synonym Symbols	PD-1; Pdc1; Ly101
NCBI Protein Information	programmed cell death protein 1
UniProt Protein Name	Programmed cell death protein 1
UniProt Gene Name	Pdcd1
UniProt Synonym Gene Names	Pd1; Protein PD-1; mPD-1
UniProt Entry Name	PDCD1_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.