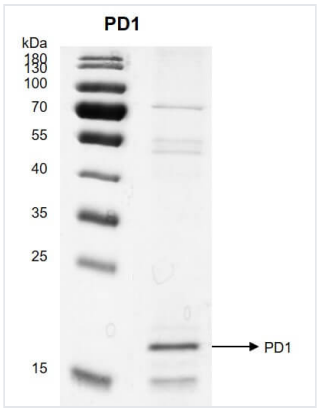
PDCD1/PD1 Recombinant Protein

PRODUCT OVERVIEW

Product Name	PDCD1/PD1, Recombinant Protein
Full Product Name	Recombinant PDCD1/PD1 (25-167) protein
Product Gene Name	PDCD1/PD1 recombinant protein
Product Synonym Names	Programmed cell death protein 1
Host	Baculovirus
Form/Format	Recombinant PDCD1/PD1 (25-167) protein is supplied in 25mM HEPES-NaOH pH7.5, 300mM NaCl, 10% glycerol, 0.04% Triton X-100, 0.5mM TCEP.
Preparation and Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. Shipping Temp: Dry Ice
Molecular Weight	31,647 Da
Protein Species	Human
Tag	DYKDDDDK-Tag
Protein Details	Recombinant PDCD1/PD1 (25-167) protein that includes amino acids 25-167 of human PD1 protein (accession number NP_005009.2) was expressed in a baculovirus expression system, and contains an C-terminal DYKDDDDK tag.
Notes	This product was manufactured as described in Protein Details. Where possible, We has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data for a given product is shown on the lot-specific Technical Data Sheet.
Dry Ice Shipment	Extra charge fee may add to your shipping cost as dry ice is required to ship this product.
Product Categories/Family for PDCD1/PD1 recombinant protein	Recombinant Proteins
Related Product Information for PDCD1/PD1 recombinant protein	Background: Programmed cell death protein 1 (PDCD1), inhibitory receptor on antigen activated T-cells that plays a critical role in induction and maintenance of immune tolerance to self. PDCD1 delivers inhibitory signals upon binding to ligands CD274/PDCD1L1 and CD273/PDCD1LG2. Following T-cell receptor (TCR) engagement, PDCD1 associates with CD3-TCR in the immunological synapse and directly inhibits T-cell activation. PDCD1 suppresses T-cell activation through the recruitment of PTPN11/SHP-2: following ligand-binding, PDCD1 is phosphorylated within the ITSM motif, leading to the recruitment of the protein tyrosine phosphatase PTPN11/SHP-2 that mediates dephosphorylation of key TCR proximal signaling molecules, such as ZAP70, PRKCQ/PKCtheta and CD247/CD3zeta. The PDCD1-mediated inhibitory pathway is exploited by tumors to attenuate anti-tumor immunity and escape destruction by the immune system, thereby facilitating tumor survival. The blockage of the PDCD1-mediated pathway results in the reversal of the exhausted T-cell phenotype and the normalization of the anti-tumor response, providing a rationale for cancer immunotherapy.
Other Notes	Small volumes of PDCD1/PD1 recombinant protein vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for PDCD1/PD1 purchase	MBS389432 is a recombinant protein targeting PDCD1/PD1. Also known as Recombinant PDCD1/PD1 (25-167) protein. Host: Baculovirus.



SDS-Page of PDCD1/PD1 recombinant protein
Recombinant PDCD1 / PD1 (25-167) protein 12.5% SDS-PAGE Coomassie staining MW: 17.8 kDa Purity: >60%

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for PDCD1/PD1. It may not necessarily be applicable to this product.

NCBI GI #	167857792
NCBI GeneID	5133
NCBI Accession #	NP_005009.2
UniProt Secondary Accession #	O00517; Q8IX89
UniProt Related Accession #	Q15116
GenBank Nucleotide #	NM_005018.2
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	PD1; PD-1; CD279; SLEB2; hPD-1; hPD-l; hSLE1
NCBI Protein Information	programmed cell death protein 1; protein PD-1; systemic lupus erythematosus susceptibility 2
NCBI Summary for PDCD1/PD1	This gene encodes a cell surface membrane protein of the immunoglobulin superfamily. This protein is expressed in pro-B-cells and is thought to play a role in their differentiation. In mice, expression of this gene is induced in the thymus when anti-CD3 antibodies are injected and large numbers of thymocytes undergo apoptosis. Mice deficient for this gene bred on a BALB/c background developed dilated cardiomyopathy and died from congestive heart failure. These studies suggest that this gene product may also be important in T cell function and contribute to the prevention of autoimmune diseases. [provided by RefSeq, Jul 2008]
Research Articles on PDCD1/PD1	**1.** These data strongly support testing of PD-1-blocking agents in combination with standard-of-care chemoradiotherapy for papillomavirus (HPV)-related oropharyngeal cancer .
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.

Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/recombinant-protein/pdcd1-pd1/389432