

Product datasheet for **TP700257**

Pdcd1 (NM_008798) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of mouse programmed cell death 1 (PD-1 / PDCD1), with C-terminal DDK/His tag, expressed in human cells, 20 µg
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	A DNA sequence from TrueORF clone, MR227347, encoding the region (Leu25 – Gln167) of mouse PDCD1
Tag:	C-DDK/His
Predicted MW:	19 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	PBS, pH 7.4, 10% glycerol
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_032824
Locus ID:	18566
UniProt ID:	Q02242 , Q544F3
RefSeq Size:	1972
Cytogenetics:	1 D
RefSeq ORF:	867
Synonyms:	Ly101; PD-1; Pdc1



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Summary:

Inhibitory receptor on antigen activated T-cells that plays a critical role in induction and maintenance of immune tolerance to self (PubMed:10485649, PubMed:11698646, PubMed:11209085, PubMed:21300912). Delivers inhibitory signals upon binding to ligands, such as CD274/PDCD1L1 and CD273/PDCD1LG2 (PubMed:11015443, PubMed:11224527, PubMed:22641383, PubMed:18287011, PubMed:18641123). Following T-cell receptor (TCR) engagement, PDCD1 associates with CD3-TCR in the immunological synapse and directly inhibits T-cell activation (PubMed:22641383). 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 (PubMed:11698646, PubMed:22641383). The PDCD1-mediated inhibitory pathway is exploited by tumors to attenuate anti-tumor immunity and facilitate tumor survival (By similarity).[UniProtKB/Swiss-Prot Function]

Product images: