

Recombinant Mouse Pdcd1 Protein (Leu25-Gln167), C-Fc-tagged

Product Information

Cat	IMP-7770
Official Symbol	PDCD1
Product Overview	Purified recombinant protein of mouse programmed cell death 1 (PD-1 / PDCD1), with C-terminal Fc tag, expressed in human cells.
Description	<p><i>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]</i></p>
Expression System	HEK293
Species	Mouse
Tag	C-Fc
Form	PBS, pH7.4, 10% glycerol
Molecular Mass	44 kDa
Protein length	Leu25-Gln167
Purity	> 80% as determined by SDS-PAGE and Coomassie blue staining.
Storage	Store at -80 centigrade. Stability: Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
Concentration	> 50 µg/mL as determined by microplate BCA method.