

## Product datasheet for **TP727305**

### **Pdcd1 Mouse Recombinant Protein**

#### **Product data:**

<b>Product Type:</b>	Recombinant Proteins
<b>Description:</b>	Recombinant Mouse PDCD1/PD-1/CD279 (C-6His)
<b>Species:</b>	Mouse
<b>Expression cDNA Clone or AA Sequence:</b>	Leu25-Gln167
<b>Tag:</b>	C-His
<b>Buffer:</b>	Lyophilized from a 0.2 um filtered solution of 20mM Tris-HCl, 150mM NaCl, pH 8.0.
<b>Note:</b>	Recombinant Mouse Programmed Cell Death Protein 1 is produced by our Mammalian expression system and the target gene encoding Leu25-Gln167 is expressed with a 6His tag at the C-terminus.
<b>Stability:</b>	12 months from date of despatch
<b>Locus ID:</b>	18566
<b>UniProt ID:</b>	<a href="#">Q02242</a>
<b>Summary:</b>	Programmed Death-1 (PD-1), firstly cloned from mouse T cell hybridoma 2B4.11, is one member of CD28/CTLA-4 superfamily. PD-1 belongs to type I transmembrane protein and acts as an important immunosuppressive molecule. The cytoplasmic tail of PD-1 contains two structural motifs, an immunoreceptor tyrosine-based inhibitory motif (ITIM) and an immunoreceptor tyrosine-based switch motif (ITSM) formed by two tyrosine residues which make the difference in PD-1 signal mediating. Mouse PD-1 is expressed in thymus and shares about 69% aa sequence identity with human PD-1. Recently, programmed death-1 (PD-1) with its ligands, programmed death ligand B7H1 (PD-L1) and B7DC (PD-L2), was found to regulate T-cell activation and tolerance, upon ligand binding, inhibiting T-cell effector functions in an antigen-specific manner. PD-1 gene knocked out mice would induce some autoimmune diseases, which suggests that PD-1 acts as a co-inhibitory molecule actively participating in maintaining peripheral tolerance. Thus, PD-1 may be a useful target for the immunologic therapy of carcinoma, infection, autoimmune diseases as well as organ transplantation.



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