

## Product datasheet for **TP727304**

### **Pdcd1 Mouse Recombinant Protein**

#### **Product data:**

<b>Product Type:</b>	Recombinant Proteins
<b>Description:</b>	Recombinant Mouse PDCD1/PD-1/CD279 (C-Fc)
<b>Species:</b>	Mouse
<b>Expression cDNA Clone or AA Sequence:</b>	Leu25-Gln167
<b>Tag:</b>	C-Fc
<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 Fc tag at the C-terminus.
<b>Storage:</b>	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Stability:</b>	12 months from date of despatch
<b>Locus ID:</b>	18566
<b>UniProt ID:</b>	<u><a href="#">Q02242</a></u>
<b>Synonyms:</b>	Programmed cell death protein 1;PD-1;CD279;Pdcd1;mPD-1



[View online »](#)

**Summary:**

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. This family also include members of CD28, CTLA-4 and ICOS. The mouse Programmed Death-1 protein, encoded by PD-1 gene, comprises four parts including a putative 20 aa signal peptide, a 149 aa extracellular region, a 21 aa transmembrane domain and a 98 aa cytoplasmic region. 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.