# **Product Name: Recombinant Mouse PD-1 (C-6His)**

Catalog #: PHM1274



### **Summary**

Name PD-1/CD279/PDCD1/Programmed cell death protein 1

**Purity** Greater than 95% as determined by reducing SDS-PAGE

**Endotoxin level** <1 EU/μg as determined by LAL test.

Construction 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.

Accession # Q02242

**Host** Human Cells

**Species** Mouse

Predicted Molecular Mass 17.2 KDa

Formulation Lyophilized from a 0.2 µm filtered solution of 20mM Tris-HCl, 150mM NaCl, pH

8.0.

Shipping The product is shipped at ambient temperature. Upon receipt, store it

immediately at the temperature listed below.

Stability&Storage Store at  $\leq$ -70°C, stable for 6 months after receipt. Store at  $\leq$ -70°C, stable for 3

months under sterile conditions after opening. Please minimize freeze-thaw

cycles.

**Reconstitution** Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is

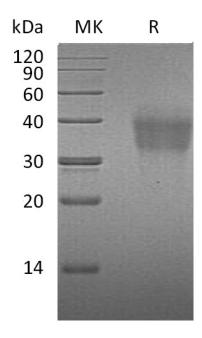
not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles. Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

## **SDS-PAGE** image

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#### **Alternative Names**

Programmed cell death protein 1;PD-1;CD279;Pdcd1;mPD-1

## **Background**

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 cytoplamsic 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.

### **Note**

For Research Use Only, Not for Diagnostic Use.