# Recombinant Rat PD-1/PDCD1/CD279 Protein



## **RPCB1578**

# **Product Information**

**Product SKU**: RPCB1578 **Gene ID**: 301626 **Size**: 10μg

**Tag**: C-His **Reactivity**: Rat

### **Additional Information**

**Expression Host**: HEK293 cells **Swissprot**: D3ZIN8

**Purity**: > 95% by SDS-PAGE.

#### **Protein Information**

**Background**: Programmed cell death 1, also known as PDCD1, is a type I transmembrane

glycoprotein, and is an immunoreceptor belonging to the CD28/CTLA-4 family

negatively regulates antigen receptor signaling by recruiting protein tyrosine

phosphatase, SHP-2 upon interacting with either of two ligands, PD-L1 or PD-L2. PD1

inhibits the T-cell proliferation and production of related cytokines including IL-1, IL-

4, IL-10 and IFN- $\gamma$  by suppressing the activation and transduction of PI3K/AKT

pathway. In addition, coligation of PD1 inhibits BCR-mediating signal by

dephosphorylating key signal transducer. PD1 has been suggested to be involved in

lymphocyte clonal selection and peripheral tolerance, and thus contributes to the

prevention of autoimmune diseases. Furthermore, PD1 is shown to be a regulator of

virus-specific CD8+ T cell survival in HIV infection. As a cell surface molecule, PDCD1

regulates the adaptive immune response. Engagement of PD-1 by its ligands PD-L1

or PD-L2 transduces a signal that inhibits T-cell proliferation, cytokine production,

and cytolytic function.

Protein Description: High quality, high purity and low endotoxin recombinant Recombinant Rat PD-

1/PDCD1/CD279 Protein, tested reactivity in HEK293 cells and has been validated in

SDS-PAGE.100% guaranteed.

**Endotoxin**:  $< 0.1 EU/\mu g$ 

**Formulation**: Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

Storage:

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.