

RP00658

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Recombinant Mouse PD-1/PDCD1/CD279 Protein

Catalog No.: RP00658

Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
Mouse	18566	Q02242

Tags

C-Fc

Synonyms

CD279;mPD-1;SLEB2;PDCD1;PD1;PD1/C
D279/PDCD1;CD279;mPD-1;SLEB2;PDCD
1;PD1;PD1/CD279/PDCD1

Product Information

Source	Purification
HEK293 cells	> 95% by SDS- PAGE.

Endotoxin

< 1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.2 μM filtered
solution of 20mM Tris, 150mM
NaCl, pH 8.0. Contact us for customized
product form or formulation.

Reconstitution

Reconstitute to a concentration of
0.1-0.5 mg/mL in 1X PBS.

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. 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.

Basic Information

Description

Recombinant Mouse PD-1/PDCD1/CD279 Protein is produced by Human cells expression system. The target protein is expressed with sequence (Leu25-Gln167) of mouse PD-1/PDCD1/CD279 (Accession #Q02242) fused with an Fc tag at the C-terminus.

Bio-Activity

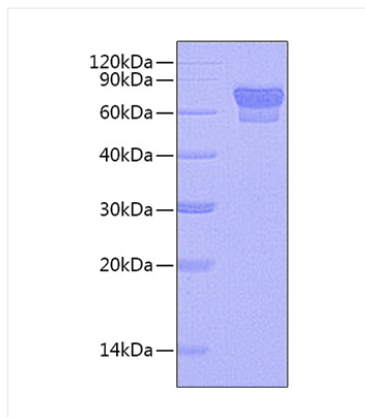
Storage

Store the lyophilized protein at -20°C to -80 °C for long term. After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week. Avoid repeated freeze/thaw cycles.

Contact

www.abclonal.com

Validation Data



Recombinant Mouse PD-1/PDCD1/CD279
Protein was determined by SDS-PAGE under
reducing conditions with Coomassie Blue.