

Recombinant Mouse PD-1/PDCD1 Protein (His Tag)

Catalog Number: PKSM041288

Note: Centrifuge before opening to ensure complete recovery of vial contents.

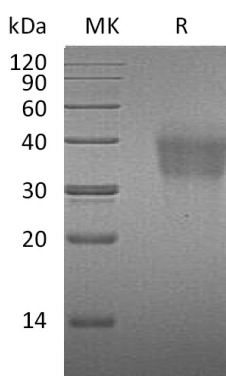
Description

Species	Mouse
Source	HEK293 Cells-derived Mouse PD-1/PDCD1 protein Leu25-Gln167, with an C-terminal His
Calculated MW	17.2 kDa
Observed MW	33-40 kDa
Accession	Q02242
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of 20mM Tris-HCl, 150mM NaCl, pH 8.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
	Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



Background

For Research Use Only

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.