

Datasheet for ABIN6992382

PD-1 Protein (AA 25-167) (His tag)





Overview

Quantity:	100 μg	
Target:	PD-1 (PDCD1)	
Protein Characteristics:	AA 25-167	
Origin:	Rhesus Monkey	
Source:	HEK-293 Cells	
Protein Type:	Recombinant	
Biological Activity:	Active	
Purification tag / Conjugate:	This PD-1 protein is labelled with His tag.	
Product Details		
Purpose:	Rhesus macaque PD-1 / PDCD1 Protein, His Tag (MALS verified)	
Purity:	>90 % as determined by SDS-PAGE.	
Endotoxin Level:	Less than 1.0 EU per μg by the LAL method.	
Target Details		
Target:	PD-1 (PDCD1)	
Alternative Name:	PD-1 (PDCD1 Products)	
Background:	Programmed cell death protein 1 (PD-1) is also known as CD279 and PDCD1, is a type I membrane protein and is a member of the extended CD28/CTLA-4 family of T cell regulators. PDCD1 is expressed on the surface of activated T cells, B cells, macrophages, myeloid cells and	

a subset of thymocytes. PD-1 has two ligands, PD-L1 and PD-L2, which are members of the ${\sf B7}$

family. PD-L1 is expressed on almost all murine tumor cell lines, including PA1 myeloma, P815 mastocytoma, and B16 melanoma upon treatment with IFN-γ. PD-L2 expression is more restricted and is expressed mainly by DCs and a few tumor lines. PD1 inhibits the T-cell proliferation and production of related cytokines including IL-1, IL-4, IL-10 and IFN-γ by suppressing the activation and transduction of PI3K/AKT pathway. In addition, coligation of PD1 inhibits BCR-mediating signal by dephosphorylating key signal transducer. In vitro, treatment of anti-CD3 stimulated T cells with PD-L1-lg results in reduced T cell proliferation and IFN-γ secretion. Monoclonal antibodies targeting PD-1 that boost the immune system are being developed for the treatment of cancer.

Molecular Weight:	17.9 kDa
NCBI Accession:	NP_001107830
Pathways:	Cancer Immune Checkpoints

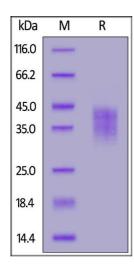
Application Details

Restrictions: For Research Use only

Handling

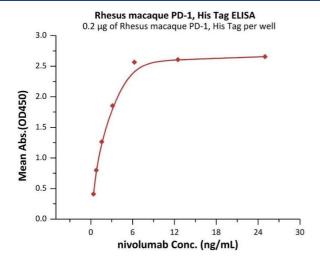
Format:	Lyophilized	
Buffer:	PBS, pH 7.4	
Storage:	-20 °C	

Images



SDS-PAGE

Image 1. Rhesus macaque PD-1, His Tag on under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90 %.



ELISA

Image 2. Immobilized Rhesus macaque PD-1, His Tag (ABIN6992382) at $2 \mu g/mL$ (100 $\mu L/well$) can bind nivolumab with a linear range of 0.1-3 ng/mL (QC tested).

ELISA

Image 3. Immobilized Biotinylated Human PD-L2, Fc,Avitag (ABIN2870562,ABIN2870563) at 1 μ g/mL (100 μ L/well) on streptavidin precoated (0.5 μ g/well) plate can bind Rhesus macaque PD-1, His Tag (ABIN6992382) with a linear range of 0.01-0.313 μ g/mL (Routinely tested).