Data Sheet (Cat.No.TMPY-00253)

TargetMol

PD-1 Protein, Cynomolgus, Recombinant (hFc)

General Information

Synonyms:	programmed cell death 1
Protein Construction:	Pro21-Gln167
Species:	Cynomolgus
Expression Host:	HEK293 Cells
Accession:	B0LAJ3
Molecular Weight:	42.4 kDa (Predicted); 55-70 kDa (Due to glycosylation)

QC Testing

Biological Activity:	Immobilized Cynomolgus PD-1, hFc Tag at 0.5 μg/ml (100 μl/well) on the plate. Dose response curve for Biotinylated Anti-PD1 Antibody, hFc Tag with the EC50 of 29.5 ng/ml determined by ELISA (QC Test).Cynomolgus PD-1, hFc Tag captured on CM5 Chip via Protein A can bind Cynomolgus PD-L1, His Tag with an affinity constant of 1.28 μM as determined in SPR assay (Biacore T200).
Purity:	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from 0.22μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Programmed cell death protein 1, also known as PD-1 and CD279 , is a protein found on the surface of cells that has a role in regulating the immune system's response to the cells of the human body by down-regulating the

immune system and promoting self tolerance by suppressing T cell inflammatory activity.

Reference

James ES, et al. (2005) PDCD1: a tissue-specific susceptibility locus for inherited inflammatory disorders. Genes Immun. 6(5): 430-7.
Okazaki T, et al. (2007) PD-1 and PD-1 ligands: from discovery to clinical application. Int Immunol. 19(7): 813-24.
del Rio ML, et al. (2008) PD-1/PD-L1, PD-1/PD-L2, and other co-inhibitory signaling pathways in transplantation. Transpl Int. 21(11): 1015-28.
Riley JL.(2009) PD-1 signaling in primary T cells. Immunol Rev. 229(1): 114-25.