

Recombinant Cynomolgus PDCD1 protein, C-hFc-Avi Tag, Biotinylated

Product Information

Cat	IMP-454
Official Symbol	PDCD1
Product Overview	<i>Biotinylated Recombinant Cynomolgus PDCD1 (NP_001271065.1) (Met1-Gln167) was expressed in HEK293, fused with a c-terminal Fc region of Human IgG1 tagged AVI tag at the C-terminus.</i>
Description	<i>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-γ by suppressing the activation and transduction of PI3K/AKT pathway. In addition, coligation of PD1 inhibits BCR-mediated 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.</i>
Expression System	HEK293
Species	Cynomolgus
Tag	C-hFc-Avi Tag
Predicted N Terminal	Leu 25
Form	<i>Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.</i>
Molecular Mass	<i>The recombinant cynomolgus PDCD1 consists of 396 amino acids and predicts a molecular mass of 44.5 kDa.</i>
Protein length	Met1-Gln167
Endotoxin	< 1.0 EU per μ g protein as determined by the LAL method.
Purity	> 95 % as determined by SDS-PAGE.

Storage

Samples are stable for up to twelve months from date of receipt at -20°C to -80°C. Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

Reconstitution

It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4°C before opening to recover the entire contents.