

Recombinant Human PD-1/PDCD1 Protein (His & Fc Tag)(Active)

Catalog No. PKSH031643

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

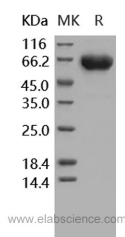
Description

Synonyms	Programmed cell death protein 1;PDCD1;PD-1;hPD-1;CD279;SLEB2;Hsle1
Species	Human
Expression Host	HEK293 Cells
Sequence	Met 1-Gln 167
Accession	NP_005009.2
Calculated Molecular Weight	44 kDa
Observed molecular weight	60-65 kDa
Tag	C-His & Fc
Bioactivity	Measured by its binding ability in a functional ELISA. Immobilized recombinant human PD-L2 at 1 µg/ml (100ul/well) can bind human PD1 / Fc chimera with a linear range of 7.8-1000 ng/ml.

Properties

Purity	> 97 % as determined by reducing SDS-PAGE.
Storage	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 sterile PBS, pH 7.4
Reconstitution	Please refer to the printed manual for detailed information.

Data



Background

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

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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.

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