



Recombinant Protein Technical Manual

Recombinant Human PD/PDCD1 Protein (His Tag)(Active)
RPES3730

Product Data:

Product SKU: RPES3730

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_005009.2

Protein Information:

Molecular Mass: 17.4 kDa

AP Molecular Mass:

Tag: C-His

Bio-activity: Measured by its binding ability in a functional ELISA. Immobilized human PD at 10 µg/ml (100 µl/well) can bind recombinant human B7-H1 / PD-L1 / Fc chimera with a linear range of 0.02-0.4 µg/ml.

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

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.

Application: Functional ELISA

Synonyms: Programmed cell death protein 1;PDCD1;PD;hPD;CD279;SLEB2;Hsle1

Immunogen Information:

Sequence: Met 1-Gln 167

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, IL-4, IL0 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 by its ligands PD-L1 or PD-L2 transduces a signal that inhibits T-cell proliferation, cytokine production, and cytolytic function.