

Recombinant Human CTLA4 Protein (His Tag)

Catalog Number: PKSH033702

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

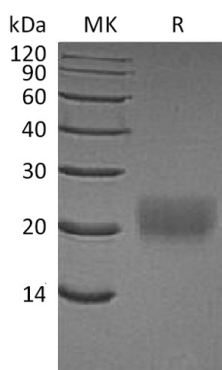
Description

Species	Human
Source	HEK293 Cells-derived Human CTLA4 protein Lys36-Asp161, with an C-terminal His
Calculated MW	14.3 kDa
Observed MW	20-25 kDa
Accession	P16410
Bio-activity	Immobilized Mouse B7-1-Fc(Cat: PKSM041366) at 2µg/ml(100 µl/well) can bind Human CTLA-4-His. The ED ₅₀ of Human CTLA-4-His is 5-50 ng/ml.

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, 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 a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Cytotoxic T lymphocyte 4 (CTLA-4; CD152) is a type I transmembrane T cell inhibitory molecule that is a member of the Ig superfamily. Human or mouse CTLA4 cDNA encodes 223 amino acids (aa) including a 35 aa signal sequence; a 126 aa extracellular domain (ECD) with one Ig-like V-type domain; a 21 aa transmembrane (TM) sequence; and a 41 aa cytoplasmic sequence. It is widely expressed with highest levels in lymphoid tissues. CD28 and CTLA-4, together with their ligands; B7-1 and B7-2; constitute one of the dominant costimulatory pathways that regulate T and B cell responses. CD28 and CTLA-4 are structurally homologous molecules that are members of the immunoglobulin (Ig) gene superfamily. CTLA4 transmits an inhibitory signal to T cells; whereas CD28 transmits a stimulatory signal. Intracellular CTLA4 is also found in regulatory T cells and may play an important role in their functions. T cell activation through the T cell receptor and CD28 leads to increased expression of CTLA4.