# Recombinant Human CTLA4 Protein (His Tag)

Catalog Number: PKSH033702



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

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 Species
 Human

 Mol\_Mass
 14.3 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<sub>50</sub> 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.

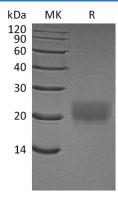
Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants

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 Tlymphocyte 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. Tcell activation through the Tcell receptor and CD28 leads to increased expression of CTLA4.

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