

# Recombinant Protein Technical Manual Recombinant Human CTLA4 Protein (His Tag)(Active)

**RPES3191** 

#### **Product Data:**

Product SKU: RPES3191 Size: 10μg

Species: Human Cells

**Uniprot:** P16410

#### **Protein Information:**

Molecular Mass: 14.3 kDa

AP Molecular Mass: 20-25 kDa

Tag: C-His

Bio-activity: Immobilized Mouse B7-Fc(Cat: PKSM041366) at 10μg/ml(100 μl/well) can bind

Human CTLA-4-His. The ED50 of Human CTLA-4-His is 2.3 ng/ml.

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

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

**Storage:** Lyophilized protein should be stored at < -20°C, though stable at room

temperature for 3 weeks. Reconstituted protein solution can be stored at  $4-7^{\circ}$ 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, pH7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:** Functional ELISA

**Synonyms:** Cytotoxic T-lymphocyte protein 4;Cytotoxic T-lymphocyte-associated antigen

4;CTLA4;CD152;Cytotoxic T-Lymphocyte-Associated Protein 4

## Immunogen Information:

Sequence: Lys36-Asp161

### 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 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.