Recombinant Protein Technical Manual

Recombinant Human CTLA4 Protein (GST Tag)

RPES3230

Product Data:

Product SKU: RPES3230

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: P16410

Protein Information:

Molecular Mass: 39.2 kDa

AP Molecular Mass: 40-55 kDa

Tag: C-GST

Bio-activity:

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°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:

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.