



Recombinant Protein Technical Manual

Recombinant Mouse CTLA4 Protein (His Tag)(Active)

RPES0378

Product Data:

Product SKU: RPES0378

Size: 10µg

Species: Mouse

Expression host: Human Cells

Uniprot: P09793

Protein Information:

Molecular Mass: 14.6 kDa

AP Molecular Mass: 17-30 kDa

Tag: C-6His

Bio-activity: Immobilized Mouse B7-Fc(Cat: PKSM041366) at 1µg/ml(100 µl/well) can bind Mouse CTLA-4-His. The ED50 of Mouse CTLA-4-His is 4 ng/ml .

Purity: > 95 % as determined by 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 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; CTLA-4; CD152; Ctlα4

Immunogen Information:

Sequence: Ala37-Asp161

Background:

Mouse Cytotoxic Tlymphocyte 4(CTLA-4,CD152), is a type I transmembrane T cell inhibitory molecule. 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. Within the ECD, Mouse CTLA-4 shares 68% aa sequence identity with human. CTLA4 is similar to the T cell costimulatory protein CD28 since both of the molecules bind to CD80 and CD86 on antigen-presenting cells. CTLA4 transmits an inhibitory signal to T cells, whereas CD28 transmits a stimulatory signal. Intracellular CTLA4 is also found inregulatory 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. Genetic variations of CTLA4 have been associated with susceptibility to systemic lupus erythematosus(SLE), Gravesdisease(GRD), Celiac disease type3(CELIAC3) and Hepatitis B virus infection(HBVinfection).