



Recombinant Protein Technical Manual

Recombinant Mouse CTLA4/CD152 Protein (His Tag)(Active)
RPES1637

Product Data:

Product SKU: RPES1637

Size: 100µg

Species: Mouse

Expression host: HEK293 Cells

Uniprot: NP_033973.2

Protein Information:

Molecular Mass: 15.3 kDa

AP Molecular Mass: 25-30 kDa

Tag: C-His

Bio-activity: 1. Measured by its binding ability in a functional ELISA. 2. Immobilized recombinant mouse CTLA4-His at 10 µg/ml (100 µl/well) can bind mouse CD80-Fc with a linear range of 0.78-62.5 ng/ml. 3. Immobilized recombinant mouse CTLA4-His at 10 µg/ml (100 µl/well) can bind human B7/Fc with a linear range of 0.7825 ng/ml. 4. Measured by its ability to inhibit IL-2 secretion by stimulated Jurkat human acute T cell leukemia cells. The ED50 for this effect is 0.1-0.5µg/mL when stimulated with 1 µg/mL Recombinant Human B7/CD80.

Purity: > 98 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg of the protein 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 sterile PBS, pH 7.4

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

Application: Functional ELISA

Synonyms: Cd152;Ctla-4;Ly-56

Immunogen Information:

Sequence: Met 1-Phe 162

Background:

Cytotoxic T-lymphocyte protein 4, also known as CTLA4 and CD152, is a single-pass type I membrane protein and a member of the immunoglobulin superfamily. It is the second member of the CD28 receptor family. The ligands or counterreceptors for these two proteins are the B7 family members, CD80 (B7) and CD86 (B7-2). 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. CD152 or cytotoxic T lymphocyte antigen-4 (CTLA-4) is an essential receptor involved in the negative regulation of T cell activation. Because of its profound inhibitory role, CD152 has been considered a sound susceptible candidate in autoimmunity and a persuasive target for cancer immunotherapy. In particular, recent evidence suggests that CD152 is also important in the homeostasis and function of a population of suppressive cells, termed regulatory T cells (Treg).