

Synonym

CTLA4,CD152

Source

Rat CTLA-4, Fc Tag(CT4-R5259) is expressed from human 293 cells (HEK293). It contains AA Ile 38 - Asp 161 (Accession # Q62859). Predicted N-terminus: Ile 38

Molecular Characterization

CTLA-4(Ile 38 - Asp 161) Fc(Pro 100 - Lys 330)
Q62859 P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 40.2 kDa. The protein migrates as 50-55 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in

Tris with Glycine, Arginine and NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

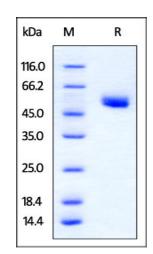
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

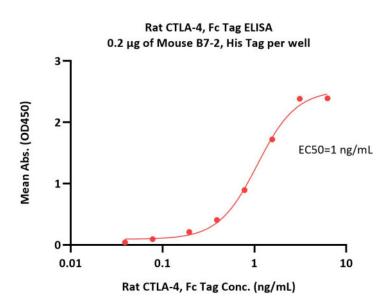


Rat CTLA-4, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA







Immobilized Mouse B7-2, His Tag (Cat. No. CD6-M52H0) at 2 μ g/mL (100 μ L/well) can bind Rat CTLA-4, Fc Tag (Cat. No. CT4-R5259) with a linear range of 0.2-3 ng/mL (QC tested).

Background

CTLA-4 (Cytotoxic T-Lymphocyte Antigen 4) is also known as CD152 (Cluster of differentiation 152), is a protein receptor that downregulates the immune system. CTLA4 is a member of the immunoglobulin superfamily, which is expressed on the surface of Helper T cells and transmits an inhibitory signal to T cells. The protein contains an extracellular V domain, a transmembrane domain, and a cytoplasmic tail. Alternate splice variants, encoding different isoforms. CTLA4 is similar to the T-cell co-stimulatory protein, CD28, and both molecules bind to CD80 and CD86, also called B7-1 and B7-2 respectively, on antigen-presenting cells. 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 be important to their function. Fusion proteins of CTLA4 and antibodies (CTLA4-Ig) have been used in clinical trials for rheumatoid arthritis.

Clinical and Translational Updates

