

Active Recombinant Rat Ctla4 Protein, His-tagged

Cat. No. Ctla4-11062R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Rat CTLA-4 Protein, His Tag is expressed from human 293 cells (HEK293). It contains AA Ile 38 - Asp 161 (Accession # Q62859-1). This protein carries a polyhistidine tag at the C-terminus. Predicted N-terminus: Ile 38
Species	Rat
Source	HEK293
ProteinLength	38-161 aa
Description	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.
Form	Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

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Bio-activity	Immobilized Human B7-2, Fc Tag at 5 µg/mL (100 µL/well) can bind Rat CTLA-4 Protein, His Tag with a linear range of 0.2-6 ng/mL.
Molecular Mass	The protein has a calculated MW of 15.4 kDa. The protein migrates as 20-30 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.
Endotoxin	Less than 1.0 EU/µg by the LAL method/rFC method.
Purity	>90% as determined by SDS-PAGE.
Storage	This product is stable after storage at: -20 to -70 centigrade for 12 months in lyophilized state; -70 centigrade for 3 months under sterile conditions after reconstitution. For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower. Please avoid repeated freeze-thaw cycles.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 µg/µL. Centrifuge the vial at 4 centigrade before opening to recover the entire contents.

GENE INFORMATION

Gene Name	Ctla4 cytotoxic T-lymphocyte-associated protein 4 [Rattus norvegicus]
Official Symbol	CTLA4
Synonyms	CTLA4; cytotoxic T-lymphocyte-associated protein 4; cytotoxic T-lymphocyte protein 4; soluble form; CD152 antigen; transmembrane form; Cd152; CTLA-4; sCTLA4;
Gene ID	63835
mRNA Refseq	NM_031674

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Protein Refseq	NP_113862
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UniProt ID	Q62859
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