Recombinant Human CTLA4 protein, mouse IgG2a Fc-tagged, low endotoxin

Cat. No. CTLA4-371H **Lot. No.** (See product label)

SPECIFICATION

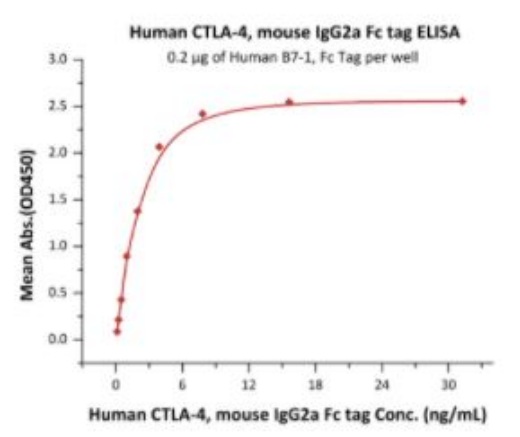
Product Overview	Recombinant Human CTLA4 protein (Ala37-Phe162)(low endotoxin), fused to Mouse IgG2a Fc tag at C-terminus, was expressed in human 293 cells (HEK293).
Species	Human
Source	HEK293
ProteinLength	126
Description	CTLA-4 (Cytotoxic T-Lymphocyte Antigen 4) is also known as CD152 (Cluster of 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 um filtered solution in 50 mM Tris, 100 mM Glycine, pH7.5,

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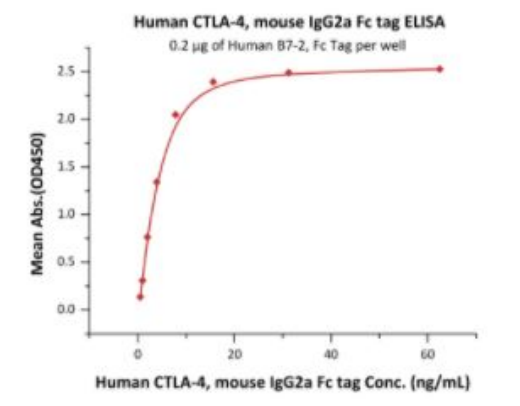
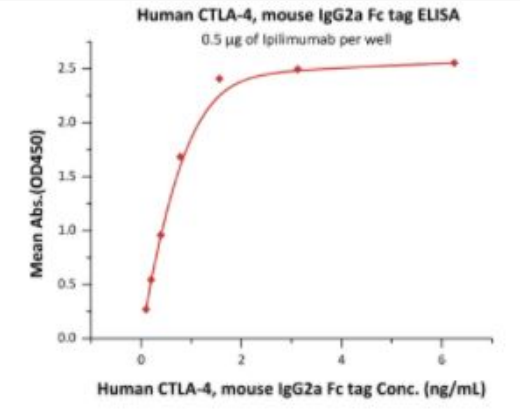
	10% trehalose.
Molecular Mass	The protein has a calculated MW of 40.6 kDa. The protein migrates as 50 kDa on a SDS-PAGE gel under reducing (R) condition due to glycosylation and 100 kDa under non-reducing (NR) condition.
Endotoxin	Less than 0.1 EU per ug by the LAL method.
Purity	>95% as determined by SDS-PAGE.
Storage	For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower. Please avoid repeated freeze-thaw cycles. This product is stable after storage at: -20 centigrade to -70 centigrade for 12 months in lyophilized state; -70 centigrade for 3 months under sterile conditions after reconstitution.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4℃ before opening to recover the entire contents.

GENE INFORMATION

Gene Name	CTLA4
Official Symbol	CTLA4
Synonyms	CTLA4; cytotoxic T-lymphocyte-associated protein 4; celiac disease 3 , CELIAC3; cytotoxic T-lymphocyte protein 4; CD; CD28; CD152; GSE; ICOS; CD152 isoform; celiac disease 3; cytotoxic T-lymphocyte antigen 4; cytotoxic T-lymphocyte-associated antigen 4; cytotoxic T-lymphocyte-associated serine esterase-4; cytotoxic T lymphocyte associated antigen 4 short spliced form; ligand and transmembrane

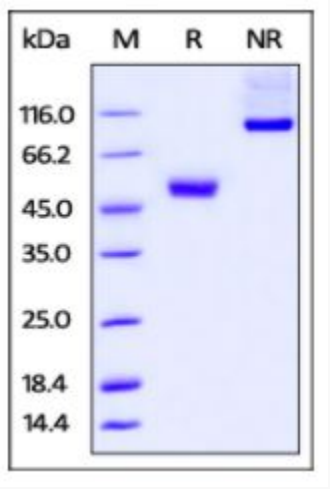
	spliced cytotoxic T lymphocyte associated antigen 4; GRD4; CTLA-4; IDDM12; CELIAC3
Gene ID	1493
mRNA Refseq	NM_001037631
Protein Refseq	NP_001032720
MIM	123890
UniProt ID	P16410
Bioactivity-ELISA of CTLA4-371H	 Immobilized Human B7-1, Fc Tag at 2 μg/mL (100 μL/well) can bind Human CTLA-4, mouse IgG2a Fc tag, low endotoxin with a linear range of 0.1-2 ng/mL (QC tested).

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Bioactivity-ELISA of CTLA4-371H	 Immobilized Human B7-2, Fc Tag at 2 μg/mL (100 μL/well) can bind Human CTLA-4, mouse IgG2a Fc tag, low endotoxin with a linear range of 0.5-7.8 ng/mL (Routinely tested).
Bioactivity-ELISA of CTLA4-371H	 Immobilized Ipilimumab at 5 μg/mL (100 μL/well) can bind Human CTLA-4, mouse IgG2a Fc tag, low endotoxin with a linear range of 0.1-0.8 ng/mL (Routinely tested).

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SDS-PAGE of CTLA4-371H



Human CTLA-4, mouse IgG2a Fc tag, low endotoxin on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

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