Datasheet for ABIN2870731

CTLA4 Protein (AA 36-162) (Fc Tag)

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Overview

Quantity:	200 µg
Target:	CTLA4
Protein Characteristics:	AA 36-162
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This CTLA4 protein is labelled with Fc Tag.

Product Details

Sequence:	AA 36-162
Characteristics:	This protein carries a human IgG1 Fc tag at the C-terminus. The protein has a calculated MW of 40.6 kDa. The protein migrates as 55 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.
Purity:	>95 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	CTLA4
Alternative Name:	CTLA-4 (CTLA4 Products)

Target Details

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.
Molecular Weight:	40.6 kDa
NCBI Accession:	NP_033973
Pathways:	Cancer Immune Checkpoints

Application Details

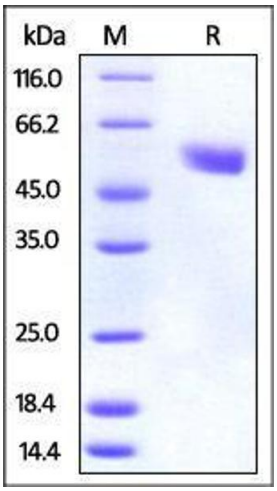
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Buffer:	Tris with Glycine, Arginine and NaCl, pH 7.5
Handling Advice:	Please avoid repeated freeze-thaw cycles.
Storage:	-20 °C

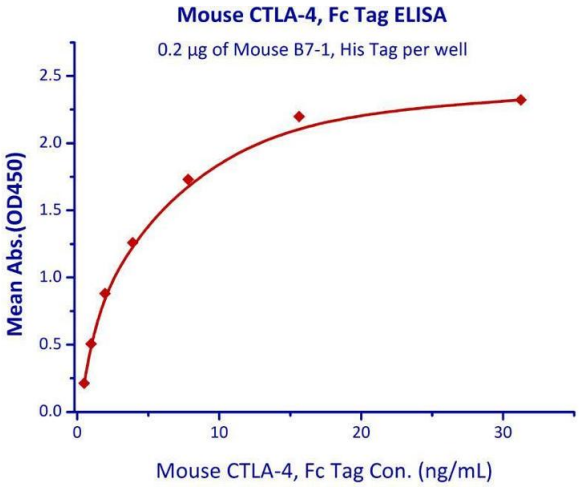
Publications

Product cited in:	Okada, Kajiya, Omata, Matsumoto, Sato, Kobayashi, Nakamura, Kaneko, Nakamura, Koyama, Sudo, Shin, Okamoto, Watanabe, Tachibana, Hirose, Saito, Takai, Matsumoto, Nakamura, Okabe, Miyamoto, Tanaka: "CTLA4-Ig Directly Inhibits Osteoclastogenesis by Interfering With Intracellular Calcium Oscillations in Bone Marrow Macrophages." in: **Journal of bone and mineral research : the official journal of the American Society for Bone and Mineral Research**, (2019) (PubMed).



SDS-PAGE

Image 1. Mouse CTLA-4, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.



Binding Studies

Image 2. Immobilized Mouse B7-1, His Tag with a linear range of 0.12-0.5 ng/mL.