

Product Specification Sheet

Recombinant Human CTLA-4 protein

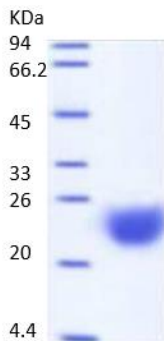
Cat# CTLA45-R-25 Recombinant (HEK) Human CTLA-4 (Cytotoxic T-Lymphocyte Antigen 4/CD152) protein (37-162aa, >95%, his-tag, low endotoxin) **SIZE:** 25 ug

CTLA4 or CTLA-4 (cytotoxic T-lymphocyte-associated protein 4), also known as CD152 (cluster of differentiation 152), is a protein receptor that, functioning as an immune checkpoint, downregulates immune responses. CTLA4 is constitutively expressed in Tregs but only upregulated in conventional T cells after activation. It acts as an "off" switch when bound to CD80 or CD86 on the surface of antigen-presenting cells.

The CTLA-4 protein is encoded by the *Ctla4* gene in mice and the CTLA4 gene in humans.

CTLA4 is a member of the immunoglobulin superfamily that is expressed by activated T cells and transmits an inhibitory signal to T cells. CTLA4 is homologous 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. CTLA-4 binds CD80 and CD86 with greater affinity and avidity than CD28 thus enabling it to outcompete CD28 for its ligands. CTLA4 transmits an inhibitory signal to T cells, whereas CD28 transmits a stimulatory signal. CTLA4 is also found in regulatory T cells and contributes to its inhibitory function. T cell activation through the T cell receptor and CD28 leads to increased expression of CTLA-4.

Form & Storage



Human CTLA-4 / CD152 Protein (Human CTLA-4, His Tag) Ala 37- Phe 162 (Accession # NP_005205.2) was produced in human 293 cells (HEK293).

Human CTLA-4, His Tag is fused with a polyhistidine tag at the C-terminus, and has a calculated MW of 14.3 kDa. The predicted N-terminus is Ala 37. DTT-reduced Protein migrates as 23-25 kDa in SDS-PAGE due to glycosylation.

Store at -20oC or below for at least 6-months.

Stability: ~12 months at -20oC.

Shipping: 4oC for solutions and room temp for powder.

Recommended Usage

ELISA: Coat at 0.1-1.0 ug/ml

Western blot: Load 50-200 ng/well and detect with appropriate antibodies.

References: Waterhouse P, et al., 1995, Science 270 (5238): 985-8; Magistrelli G, et al., 1999. Eur. J. Immunol. 29 (11): 3596-602; Rudd, CE. et al., 2009, Immunol. Rev. 229 (1): 12-26.

**This product is for In vitro research use only.*

Related material available from ADI

Catalog# Prod Description

210-220-CA4 Mouse CTLA-4 (Cytotoxic T-Lymphocyte Antigen 4/CD152) ELISA Kit, 96 tests, quantitative

210-230-CA4 Human CTLA-4 (Cytotoxic T-Lymphocyte Antigen 4/CD152) ELISA Kit, 96 tests, quantitative

AB-11610 Hamster Mono Anti-Mouse CTLA-4 (CD152) IgG

CTLA45-R-25 Recombinant (HEK) Human CTLA-4 (Cytotoxic T-Lymphocyte Antigen 4/CD152) protein (37-162aa, >95%, his-tag, low endotoxin)

CTLA46-R-25 Recombinant (HEK) Mouse CTLA-4 (Cytotoxic T-Lymphocyte Antigen 4/CD152) protein (36-162aa, >95%, his-tag, low endotoxin)

CTLA45-R-10-human-CTLA-4-protein

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