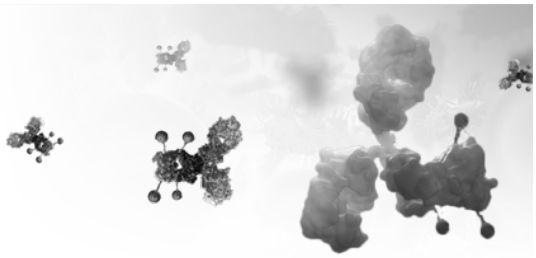

Armenian Hamster Anti-Mouse CTLA-4 (CD152) Monoclonal antibody, clone UC10-4F10-11 (CABT-L4322)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	The UC10-4F10-11 monoclonal antibody reacts with mouse CTLA-4 (cytotoxic T lymphocyte antigen-4) also known as CD152. CTLA-4 is a 33 kDa cell surface receptor encoded by the Ctla4 gene that belongs to the CD28 family of the Ig superfamily. CTLA-4 is expressed on activated T and B lymphocytes. CTLA-4 is structurally similar to the T-cell co-stimulatory protein, CD28, and both molecules bind to the B7 family members B7-1 (CD80) and B7-2 (CD86). Upon ligand binding, CTLA-4 negatively regulates cell-mediated immune responses. CTLA-4 plays roles in induction and/or maintenance of immunological tolerance, thymocyte development, and regulation of protective immunity. The critical role of CTLA-4 in immune down-regulation has been demonstrated in CTLA-4 deficient mice, which succumb at 3-5 weeks of age due to the development of a lymphoproliferative disease. CTLA-4 is among a group of inhibitory receptors being explored as cancer treatment targets through immune checkpoint blockade. The UC10-4F10-11 antibody has been shown to promote T cell co-stimulation by blocking CTLA-4 binding to the B7 co-receptors, allowing for CD28 binding.
Target	Mouse CTLA-4 (CD152)
Immunogen	Mouse CTLA-4 IgG2a fusion protein
Isotype	IgG
Source/Host	Armenian Hamster
Species Reactivity	Mouse
Clone	UC10-4F10-11
Purification	Protein G purified. Purity>95%. Determined by SDS-PAGE

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Conjugate	Functional Grade
Applications	in vivo CTLA-4 neutralization, in vitro CTLA-4 neutralization, FC, WB
Molecular Weight	150 kDa
Format	0.2 μM filtered liquid. Purified from tissue culture supernatant in an animal free facility
Concentration	Lot specific
Size	5 mg
Buffer	PBS, pH 6.5. Contains no stabilizers or preservatives. [low endotoxin azide-free] Endotoxin level: <1EU/mg (<0.001EU/μg). Determined by LAL gel clotting assay Related dilution buffer: CABT-LB02
Preservative	None
Storage	The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction	This gene is a member of the immunoglobulin superfamily and encodes a protein which transmits an inhibitory signal to T cells. The protein contains a V domain, a transmembrane domain, and a cytoplasmic tail. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. The membrane-bound isoform functions as a homodimer interconnected by a disulfide bond, while the soluble isoform functions as a monomer. Mutations in this gene have been associated with insulin-dependent diabetes mellitus, Graves disease, Hashimoto thyroiditis, celiac disease, systemic lupus erythematosus, thyroid-associated orbitopathy, and other autoimmune diseases.
Keywords	CTLA-4

GENE INFORMATION

Official Symbol	cytotoxic T-lymphocyte-associated protein 4
Synonyms	CTLA-4
References	Triplett, T. A., et al. (2018). "Reversal of indoleamine 2,3-dioxygenase-mediated cancer immune suppression by systemic kynurenine depletion with a therapeutic enzyme." Nat

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