

Product datasheet

Alexa Fluor® 555 Anti-CTLA4 antibody [CAL49] ab283489

Recombinant RabMAb

★★★★★ [1 Abreviews](#) [2 Images](#)

Overview

Product name	Alexa Fluor® 555 Anti-CTLA4 antibody [CAL49]
Description	Alexa Fluor® 555 Rabbit monoclonal [CAL49] to CTLA4
Host species	Rabbit
Conjugation	Alexa Fluor® 555. Ex: 555nm, Em: 565nm
Tested applications	Suitable for: IHC-P
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	IHC: Human normal tonsil sections
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.</p> <p>Alexa Fluor® is a registered trademark of Molecular Probes, Inc, a Thermo Fisher Scientific Company. The Alexa Fluor® dye included in this product is provided under an intellectual property license from Life Technologies Corporation. As this product contains the Alexa Fluor® dye, the purchase of this product conveys to the buyer the non-transferable right to use the purchased product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). As this product contains the Alexa Fluor® dye the sale of this product is expressly conditioned on the buyer not using the product or its components, or any materials made using the product or its components, in any activity to generate revenue, which may include, but is not limited to use of the product or its components: (i) in manufacturing; (ii) to provide a service, information, or data in return for payment (iii) for therapeutic, diagnostic or prophylactic purposes; or (iv) for resale, regardless of whether they are sold for use in research. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, 5781 Van Allen Way, Carlsbad, CA 92008 USA or outlicensing@thermofisher.com.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle. Store In the Dark.
Storage buffer	pH: 7.20 Preservative: 0.02% Sodium azide Constituents: 68% PBS, 30% Glycerol (glycerin, glycerine), 1% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	CAL49
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab283489 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P	★★★★★ (1)	1/100.

Target

Function	Inhibitory receptor acting as a major negative regulator of T-cell responses. The affinity of CTLA4 for its natural B7 family ligands, CD80 and CD86, is considerably stronger than the affinity of their cognate stimulatory coreceptor CD28.
Tissue specificity	Widely expressed with highest levels in lymphoid tissues. Detected in activated T-cells where expression levels are 30- to 50-fold less than CD28, the stimulatory coreceptor, on the cell surface following activation.
Involvement in disease	<p>Genetic variation in CTLA4 influences susceptibility to systemic lupus erythematosus (SLE) [MIM:152700]. SLE is a chronic, inflammatory and often febrile multisystemic disorder of connective tissue. It affects principally the skin, joints, kidneys and serosal membranes. SLE is thought to represent a failure of the regulatory mechanisms of the autoimmune system.</p> <p>Note=Genetic variations in CTLA4 may influence susceptibility to Graves disease, an autoimmune disorder associated with overactivity of the thyroid gland and hyperthyroidism.</p> <p>Genetic variation in CTLA4 is the cause of susceptibility to diabetes mellitus insulin-dependent type 12 (IDDM12) [MIM:601388]. A multifactorial disorder of glucose homeostasis that is characterized by susceptibility to ketoacidosis in the absence of insulin therapy. Clinical features are polydipsia, polyphagia and polyuria which result from hyperglycemia-induced osmotic diuresis and secondary thirst. These derangements result in long-term complications that affect the eyes, kidneys, nerves, and blood vessels.</p> <p>Genetic variation in CTLA4 is the cause of susceptibility to celiac disease type 3 (CELIAC3) [MIM:609755]. It is a multifactorial disorder of the small intestine that is influenced by both environmental and genetic factors. It is characterized by malabsorption resulting from</p>

inflammatory injury to the mucosa of the small intestine after the ingestion of wheat gluten or related rye and barley proteins. In its classic form, celiac disease is characterized in children by malabsorption and failure to thrive.

Sequence similarities

Contains 1 Ig-like V-type (immunoglobulin-like) domain.

Post-translational modifications

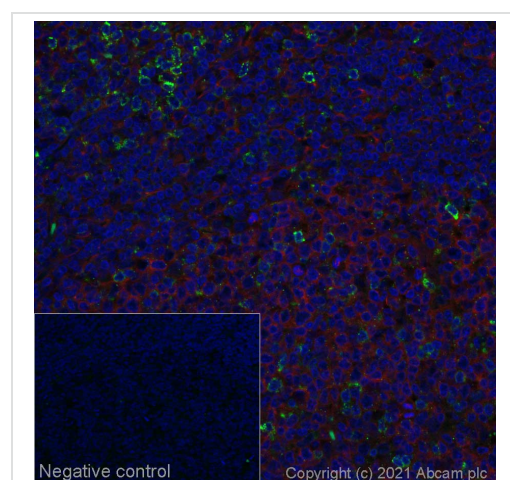
N-glycosylation is important for dimerization.

Phosphorylation at Tyr-201 prevents binding to the AP-2 adapter complex, blocks endocytosis, and leads to retention of CTLA4 on the cell surface.

Cellular localization

Cell membrane. Exists primarily an intracellular antigen whose surface expression is tightly regulated by restricted trafficking to the cell surface and rapid internalisation and.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Alexa Fluor® 555 Anti-CTLA4 antibody [CAL49] (ab283489)

Immunofluorescence staining of CTLA4 staining in a section of formalin-fixed paraffin-embedded human normal tonsil*.

Performed on a Leica BOND. The section was pre-treated using heat mediated antigen retrieval with EDTA (pH9.0) using retrieval settings of 110°C for 20 minutes. The section was then incubated at room temperature for 1 hour with ab283489 at 1/100 dilution (shown in green) and counterstained using [ab190573](#), Rabbit anti-Tubulin (A647)(1/250) at 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue). The section was then mounted using Dako Fluorescence Mounting Medium®.

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

For other IHC staining systems (automated and non-automated), customers should optimize variable parameters such as antigen retrieval conditions, antibody concentrations and incubation times.

*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Alexa Fluor® 555 Anti-CTLA4 antibody [CAL49]
(ab283489)

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