abcam

ab24935

FITC Anti-CTLA-4/CD152 antibody [1B8]

Anti-CTLA-4/CD152 antibody [1B8] conjugated to FITC - suitable for flow cytometry, and reacts with mouse samples. Clone [1B8] is a Armenian Hamster monoclonal antibody cited in 6 publications.

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Key facts

Isotype	IgG
Host species	Armenian hamster
Conjugation	FITC
Excitation/Emission	Ex: 495nm, Em: 519nm
Storage buffer	pH: 7.4 Preservative: 0.1% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Native Full Length Protein corresponding to Human CTLA4. Database link P16410
Clone number	1B8
Purification technique	Affinity purification
Specificity	ab24935 recognises mouse CD152/CTLA-4
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Mouse
Dilution info	3 µg for 10^6 Cells
Notes	ab18473 - Armenian Hamster monoclonal IgG, is suitable for use as an isotype control with this antibody.

Target data

See full target information CTLA-4/CD152

Function	Inhibitory receptor acting as a major negative regulator of T-cell responses (PubMed:11279501, PubMed:11279502, PubMed:16551244, PubMed:1714933, PubMed:18641304, PubMed:28484017). Acts as a decoy receptor: 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 (PubMed:11279501, PubMed:11279502, PubMed:16551244, PubMed:1714933, PubMed:28484017).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Store in the dark

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	CTLA-4 also known as CD152 is an immune checkpoint receptor with a molecular weight of approximately 34 kDa. This protein is expressed on the surface of T-cells especially after activation and sometimes on regulatory T-cells (Tregs). CTLA-4 competes with CD28 for binding to the same ligands CD80 and CD86 on antigen-presenting cells. Unlike CD28 which stimulates T-cell activation CTLA-4 sends inhibitory signals to downregulate immune responses. By doing this CTLA-4 helps maintain immune system homeostasis and prevents autoimmune reactions.
Biological function summary	The CTLA-4 protein functions as a critical regulator of the immune system. It interacts with CD80/CD86 in a complex that effectively transmits inhibitory signals to T-cells. CTLA-4 controls the amplitude of the initial activation of T-cells ensuring that the body's immune responses are kept under control. In regulatory T-cells CTLA-4 engagement contributes to their immunosuppressive functions through

	which they maintain tolerance to self-antigens and prevent overactive immune reactions.
Pathways	CTLA-4 involves itself in the adaptive immune response pathways specifically the regulation of T-cell activity. CTLA-4's interaction with CD80/CD86 modulates pathways associated with TCR (T-cell receptor) signaling. When CTLA-4 binds its ligands it recruits phosphatases such as SHP-2 that dephosphorylate signaling proteins leading to the downregulation of T-cell interaction. This pathway interaction exemplifies how CTLA-4 acts in concert with proteins like CD28 to finely tune immune responses.
Associated diseases and disorders	CTLA-4 plays a role in autoimmune diseases and cancer. The dysregulation of CTLA-4 function can lead to autoimmune disorders where the immune system attacks the body's own tissue. In cancer tumor cells may manipulate CTLA-4 pathways to evade immune surveillance. Targeted therapies like anti-CTLA-4 antibodies such as ipilimumab have been developed to block CTLA-4 aiming to enhance the immune system’s ability to attack cancer cells. These treatments highlight the role of CTLA-4 in balancing immune activity and the potential to alter this balance for therapeutic benefit.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

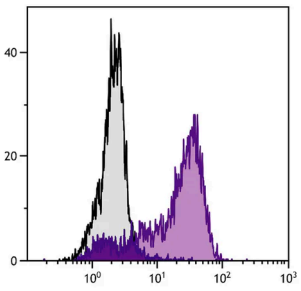
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

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1 product image



Flow Cytometry - FITC Anti-CTLA-4/CD152 antibody [1B8] (ab24935)

CTLA-4/CD152 Flow Cytometry staining using armenian hamster Anti-CTLA-4/CD152 antibody

Flow cytometry analysis staining CTLA4 in mouse splenocytes using ab24935 at a dilution of 1 ug/10^6 cells. Hamster anti-mouse CD152-FITC was used as an isotype control.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.