

Product datasheet

Alexa Fluor® 647 Anti-CAD antibody [EP710Y] ab203699

Recombinant RabMAb

3 Images

Overview

Product name	Alexa Fluor® 647 Anti-CAD antibody [EP710Y]
Description	Alexa Fluor® 647 Rabbit monoclonal [EP710Y] to CAD
Host species	Rabbit
Conjugation	Alexa Fluor® 647. Ex: 652nm, Em: 668nm
Tested applications	Suitable for: Flow Cyt (Intra), ICC/IF
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	ICC/IF: HeLa cells. Flow Cyt (intra): HeLa cells.
General notes	<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. Avoid freeze / thaw cycle. Store In the Dark.

Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EP710Y
Isotype	IgG

Applications

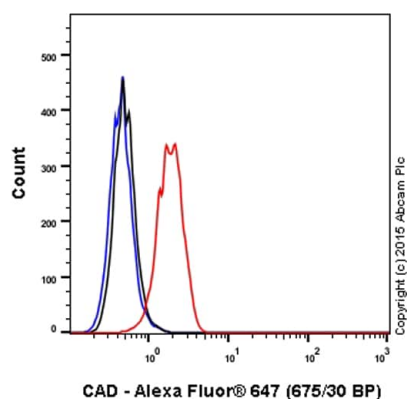
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab203699 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/50.
ICC/IF		1/50. This product gave a positive signal in HeLa cells fixed with 4% formaldehyde (10 min) and 100% methanol (5 min).

Target

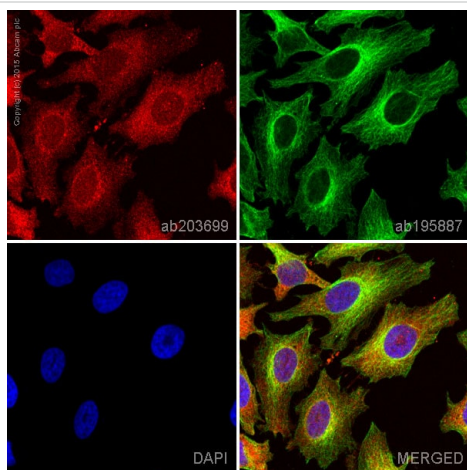
Relevance	Carbamoyl phosphate synthetase-aspartate carbamoyltransferase-dihydroorotase (CAD) is a multifunctional protein that initiates and regulates mammalian de novo pyrimidine biosynthesis. This trifunctional protein which is associated with the enzymatic activities of the first 3 enzymes in the 6-step pathway of pyrimidine biosynthesis is the rate-limiting step in the de novo pyrimidine synthetic pathway. Although most of the CAD protein in the cell is cytosolic, phosphorylation at threonine 456 localizes the protein to the nucleus. While MAPK and EGF phosphorylate CAD at threonine 456, MAPK and c-myc have been found to induce over-expression of CAD.
Cellular localization	Cytoplasmic and Nuclear

Images



Flow Cytometry (Intracellular) - Alexa Fluor® 647
Anti-CAD antibody [EP710Y] (ab203699)

Overlay histogram showing HeLa cells stained with ab203699 (red line). The cells were fixed with 4% formaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab203699, 1/50 dilution) for 30 min at 22°C. Isotype control antibody (black line) was rabbit monoclonal IgG [EPR25A] Alexa Fluor® 647 (**ab199093**) used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a solid-state 25mW red diode laser (635 nm) and 675/30 bandpass filter.



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-CAD antibody [EP710Y] (ab203699)

ab203699 staining CAD in HeLa cells. The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab203699 at a 1/50 dilution (shown in red) and **ab195887**, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 488), at a 1/250 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue).

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

This product also gave a positive signal under the same testing conditions in HeLa cells fixed with 100% methanol (5 min)

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® 647 Anti-CAD antibody [EP710Y]
(ab203699)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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