


Anti-CAD antibody ab99312

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Overview

Product name	Anti-CAD antibody
Description	Rabbit polyclonal to CAD
Host species	Rabbit
Tested applications	Suitable for: IHC-P, WB
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rat, Rabbit, Guinea pig, Dog, Pig, Chimpanzee, Rhesus monkey, Gorilla, Chinese hamster, Orangutan, Elephant 
Immunogen	Synthetic peptide corresponding to Human CAD aa 1650-1750. Database link: NP_004332.2
Positive control	HeLa, 293T and NIH3T3 whole cell lysates.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 6.8 Preservative: 0.09% Sodium azide Constituents: 0.1% BSA, Tris buffered saline
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab99312 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		1/100 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		1/2000 - 1/10000. Predicted molecular weight: 243 kDa.

Target

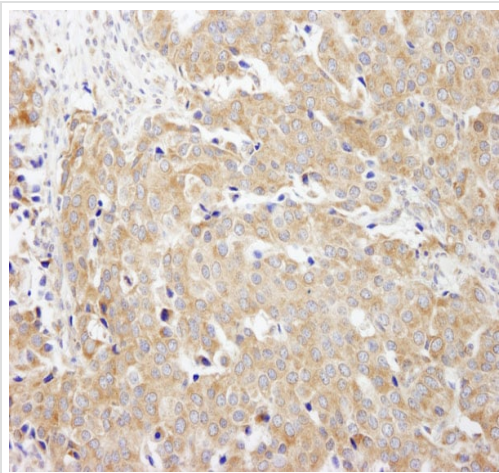
Relevance

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

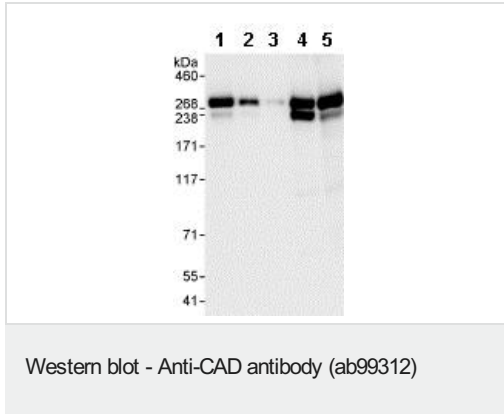
Cytoplasmic and Nuclear

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human breast carcinoma tissue labelling CAD with ab99312 at 1/200 (1 µg/ml). Detection: DAB.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CAD antibody (ab99312)



All lanes : Anti-CAD antibody (ab99312) at 0.04 µg/ml

Lane 1 : HeLa whole cell lysates at 50 µg

Lane 2 : HeLa whole cell lysates at 15 µg

Lane 3 : HeLa whole cell lysates at 5 µg

Lane 4 : 293T whole cell lysates at 50 µg

Lane 5 : NIH3T3 whole cell lysates at 50 µg

Predicted band size: 243 kDa

Exposure time: 3 seconds

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

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