abcam

Product datasheet

Anti-CAD antibody ab99312

1 References 2 Images

Overview

Product name	Anti-CAD antibody
Description	Rabbit polyclonal to CAD
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P, WB **Unsuitable for:** IP
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 a region within amino acids 1650-1700 of Human CAD (NP_004332.2).
Positive control	HeLa, 293T and NIH3T3 whole cell lysates.

Properties

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

Applications

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.

Application	Abreviews	Notes
WB		1/2000 - 1/10000. Predicted molecular weight: 243 kDa.

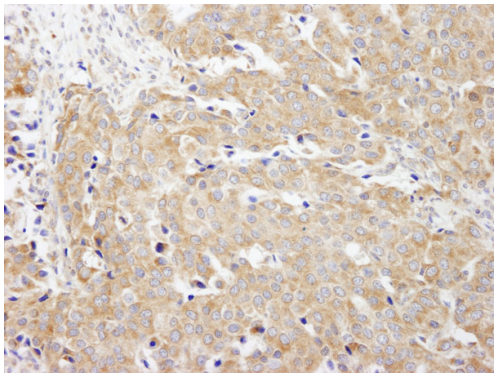
Application notes Is unsuitable for IP.

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.

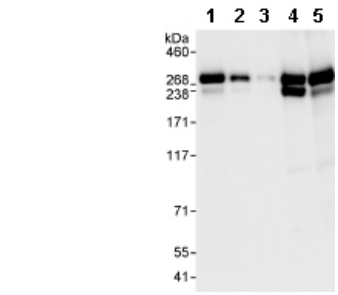
Cellular localization Cytoplasmic and Nuclear

Images



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

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



Western blot - 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

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