


## Product datasheet

# Anti-CAD antibody ab99312

1 References 2 Images

### Overview

<b>Product name</b>	Anti-CAD antibody
<b>Description</b>	Rabbit polyclonal to CAD
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, WB <b>Unsuitable for:</b> IP
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human <b>Predicted to work with:</b> Rat, Rabbit, Guinea pig, Dog, Pig, Chimpanzee, Rhesus monkey, Gorilla, Chinese hamster, Orangutan, Elephant 
<b>Immunogen</b>	Synthetic peptide, corresponding to a region within amino acids 1650-1700 of Human CAD (NP_004332.2).
<b>Positive control</b>	HeLa, 293T and NIH3T3 whole cell lysates.

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	Preservative: 0.09% Sodium Azide Constituents: 0.1% BSA, Tris buffered saline
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	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
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WB 1/2000 - 1/10000. Predicted molecular weight: 243 kDa.

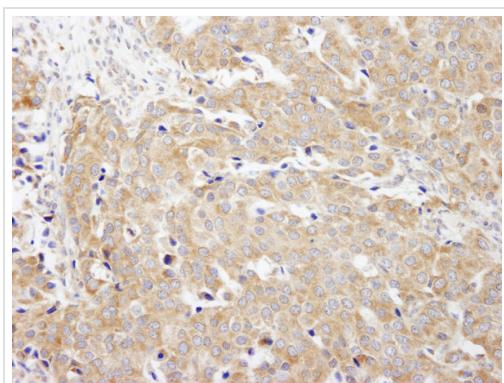
**Application notes** Is unsuitable for IP.

## 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.

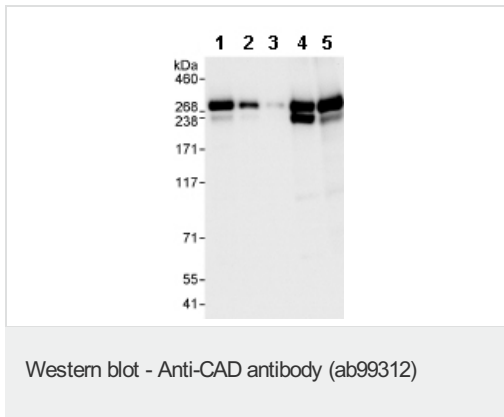
**Cellular localization** Cytoplasmic and Nuclear

## Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) 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 AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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