



## **Anti-CAD polyclonal antibody (CABT-BL827)**

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

Immunogen	Synthetic peptide (the amino acid sequence is considered to be commercially sensitive) corresponding to a region within residues 1650 - 1700 of Human CAD
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human
Purification	Immunogen affinity purified
Conjugate	Unconjugated
Applications	IHC-P
Cellular Localization	Cytoplasmic and Nuclear
Format	Liquid
Buffer	0.1% BSA, Tris buffered saline
Preservative	0.09% Sodium Azide
Storage	Store at +4°C.

## **BACKGROUND**

Introduction

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,

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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.

## **GENE INFORMATION**

Entrez Gene ID	<u>790</u>
Protein Refseq	<u>NP_004332</u>
UniProt ID	<u>P27708</u>