

**Anti-CAD Rabbit Monoclonal Antibody**  
**Catalog # ABO15759****Specification****Anti-CAD Rabbit Monoclonal Antibody - Product Information**

Application	WB, IF, ICC, IP, FC
Primary Accession	<a href="#">P27708</a>
Host	Rabbit
Isotype	IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-CAD Rabbit Monoclonal Antibody . Tested in WB, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human.

**Anti-CAD Rabbit Monoclonal Antibody - Additional Information**

**Gene ID** 790

**Other Names**

Multifunctional protein CAD, Carbamoyl phosphate synthetase 2-aspartate transcarbamylase-dihydroorotase, Glutamine-dependent carbamoyl phosphate synthase, 6.3.5.5, Glutamine amidotransferase, GATase, GLNase, 3.5.1.2, Aspartate carbamoyltransferase, 2.1.3.2, Dihydroorotase, 3.5.2.3, CAD ([http://www.genenames.org/cgi-bin/gene\\_symbol\\_report?hgnc\\_id=1424](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=1424))  
HGNC:1424

**Calculated MW**

260 kDa KDa

**Application Details**

WB 1:500-1:1000<br>ICC/IF 1:50-1:200<br>IP 1:30<br>FC 1:80

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human CAD

**Purification**

Affinity-chromatography

**Storage**

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

## Anti-CAD Rabbit Monoclonal Antibody - Protein Information

**Name** CAD ([HGNC:1424](#))

### Function

Multifunctional protein that encodes the first 3 enzymatic activities of the de novo pyrimidine pathway: carbamoylphosphate synthetase (CPSase; EC 6.3.5.5), aspartate transcarbamylase (ATCase; EC 2.1.3.2) and dihydroorotase (DHOase; EC 3.5.2.3). The CPSase-function is accomplished in 2 steps, by a glutamine-dependent amidotransferase activity (GATase) that binds and cleaves glutamine to produce ammonia, followed by an ammonium-dependent carbamoyl phosphate synthetase, which reacts with the ammonia, hydrogencarbonate and ATP to form carbamoyl phosphate. The endogenously produced carbamoyl phosphate is sequestered and channeled to the ATCase active site. ATCase then catalyzes the formation of carbamoyl-L-aspartate from L-aspartate and carbamoyl phosphate. In the last step, DHOase catalyzes the cyclization of carbamoyl aspartate to dihydroorotate.

### Cellular Location

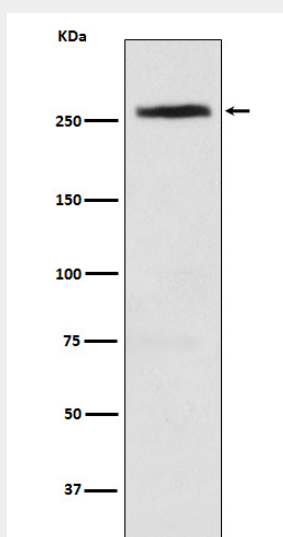
Cytoplasm. Nucleus. Note=Cytosolic and unphosphorylated in resting cells, translocates to the nucleus in response to EGF stimulation, nuclear import promotes optimal cell growth

## Anti-CAD Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-CAD Rabbit Monoclonal Antibody - Images



Western blot analysis of CAD expression in HeLa cell lysate.