

ARG58350 anti-CAD antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes CAD
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	CAD
Species	Human
Immunogen	Recombinant fusion protein corresponding to aa. 1650-1900 of Human CAD (NP_004332.2).
Conjugation	Un-conjugated
Alternate Names	EC 2.1.3.2; EC 6.3.5.5; CAD protein [Includes: Glutamine-dependent carbamoyl-phosphate synthase; EC 3.5.2.3

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	SW620	
Observed Size	243 kDa	

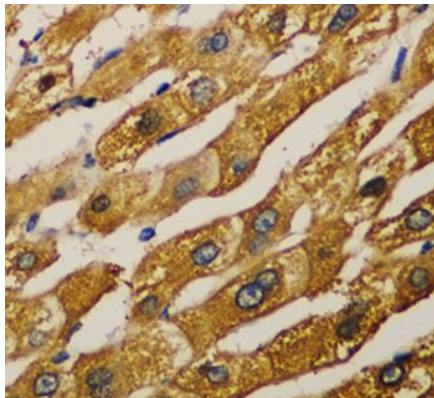
Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Bioinformation

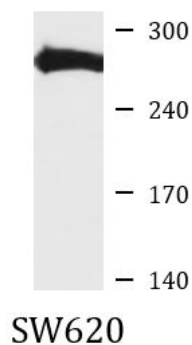
Gene Symbol	CAD
Gene Full Name	carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase
Background	The de novo synthesis of pyrimidine nucleotides is required for mammalian cells to proliferate. This gene encodes a trifunctional protein which is associated with the enzymatic activities of the first 3 enzymes in the 6-step pathway of pyrimidine biosynthesis: carbamoylphosphate synthetase (CPS II), aspartate transcarbamoylase, and dihydroorotase. This protein is regulated by the mitogen-activated protein kinase (MAPK) cascade, which indicates a direct link between activation of the MAPK cascade and de novo biosynthesis of pyrimidine nucleotides. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Apr 2015]
Function	This protein is a "fusion" protein encoding four enzymatic activities of the pyrimidine pathway (GATase, CPSase, ATCase and DHOase). [UniProt]
Calculated Mw	243 kDa
PTM	Activated by MAP kinase (Erk1/2) phosphorylation just prior to the S phase of the cell cycle, when the demand for pyrimidine nucleotides is greatest, and down-regulated as the cells emerge from S phase by protein kinase A (PKA) phosphorylation. Phosphorylation at Ser-1859 by RPS6KB1 downstream of MTOR promotes oligomerization and stimulates dihydroorotase activity. Phosphorylation at Ser-1406 reduces sensitivity to feedback inhibition by UTP. [UniProt]
Cellular Localization	Cytoplasm, Nucleus. [UniProt]

Images



ARG58350 anti-CAD antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human liver stained with ARG58350 anti-CAD antibody at 1:100 dilution.



ARG58350 anti-CAD antibody WB image

Western blot: 25 µg of SW620 cell lysate stained with ARG58350 anti-CAD antibody at 1:1000 dilution.