Anti-CAD antibody

Description	Rabbit polyclonal to CAD.

Model	STJ91958
Host	Rabbit
Reactivity	Human, Mouse
Applications	ELISA, IHC
Immunogen	Synthesized peptide derived from human CAD around the non-phosphorylation site of T456.
Immunogen Region	400-480 aa
Gene ID	790
Gene Symbol	CAD
Dilution range	IHC 1:100-1:300ELISA 1:20000
Specificity	CAD Polyclonal Antibody detects endogenous levels of CAD protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	CAD protein Includes: Glutamine-dependent carbamoyl-phosphate synthase Aspartate carbamoyltransferase Dihydroorotase
Molecular Weight	250 kDa
Clonality	Polyclonal
Conjugation	Unconjugated

Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:1424OMIM:114010
Alternative Names	CAD protein Includes: Glutamine-dependent carbamoyl-phosphate synthase Aspartate carbamoyltransferase Dihydroorotase
Function	This protein is a "fusion" protein encoding four enzymatic activities of the pyrimidine pathway (GATase, CPSase, ATCase and DHOase).
Cellular Localization	Cytoplasm Nucleus. Cytosolic and unphosphorylated in resting cells, translocates to the nucleus in response to EGF stimulation, nuclear import promotes optimal cell growth.
Post-translational Modifications	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 sensitivy to feedback inhibition by UTP.