

Product datasheet for **AP50710PU-N**

CAD (Center) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	ELISA: 1/1000. Western blot: 1/100 - 1/500. Immunohistochemistry on paraffin sections: 1/10 - 1/50.
Reactivity:	Human
Host:	Rabbit
Isotype:	Ig
Clonality:	Polyclonal
Immunogen:	KLH conjugated synthetic peptide between 787-816 amino acids from the Central region of human CAD
Specificity:	This antibody reacts to CAD.
Formulation:	PBS State: Aff - Purified State: Liquid purified Ig fraction Preservative: 0.09% (W/V) sodium azide
Concentration:	lot specific
Purification:	Affinity chromatography on Protein A
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	242984 Da
Gene Name:	carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase
Database Link:	Entrez Gene 790 Human P27708



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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.

Synonyms:

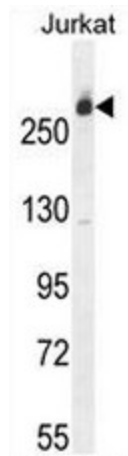
Dihydroorotase, GATase, ACTase, DHOase

Protein Families:

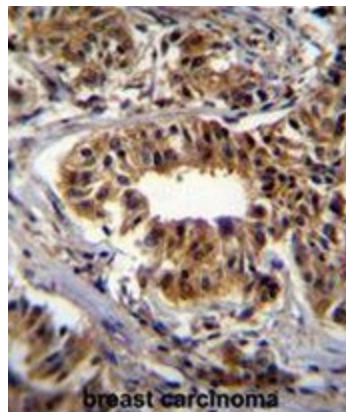
Druggable Genome

Protein Pathways:

Alanine, aspartate and glutamate metabolism, Metabolic pathways, Pyrimidine metabolism

Product images:

CAD Antibody (Center) western blot analysis in Jurkat cell line lysates (35ug/lane). This demonstrates the CAD antibody detected the CAD protein (arrow).



CAD Antibody (Center) immunohistochemistry analysis in formalin fixed and paraffin embedded human breast carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of CAD Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.