

产品名称: CAD Rabbit Polyclonal Antibody
产品货号: APRab07823



产品概述 (Summary)

产品名称 (Production Name)	CAD Rabbit Polyclonal Antibody
描述 (Description)	Rabbit polyclonal Antibody
宿主 (Host)	Rabbit
应用 (Application)	IHC, ICC, IF, ELISA
种属反应性 (Reactivity)	Human, Mouse

产品性能 (Performance)

偶联物 (Conjugation)	Unconjugated
修饰 (Modification)	Unmodified
同种型 (Isotype)	IgG
克隆 (Clonality)	Polyclonal
形式 (Form)	Liquid
存放说明 (Storage)	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
储存溶液 (Buffer)	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
纯化方式 (Purification)	Affinity purification

免疫原信息 (Immunogen)

基因名 (Gene Name)	CAD
别名 (Alternative Names)	CAD; CAD protein
基因 ID (Gene ID)	790.0
蛋白 ID (SwissProt ID)	P27708. The antiserum was produced against synthesized peptide derived from human CAD. AA range: 422-471

产品应用 (Application)

稀释比 (Dilution Ratio)	IHC 1:100-1:300, ICC/IF 1:50-1:200, ELISA 1:10000-1:20000
蛋白分子量 (Molecular Weight)	250kDa

研究背景 (Background)

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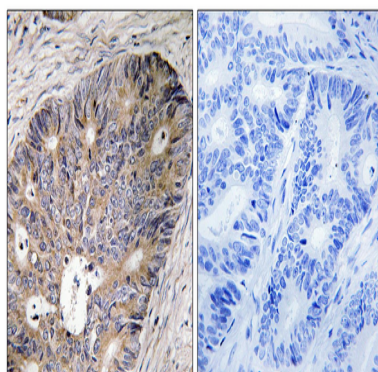


The de novo synthesis of pyrimidine nucleotides is required for mammalian cells to proliferate. This gene encodes a trifunctional protein which is associated with the enzymatic activities of the first 3 enzymes in the 6-step pathway of pyrimidine biosynthesis: carbamoylphosphate synthetase (CPS II), 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],catalytic activity:(S)-dihydroorotate + H(2)O = N-carbamoyl-L-aspartate.,catalytic activity:2 ATP + L-glutamine + HCO(3)(-) + H(2)O = 2 ADP + phosphate + L-glutamate + carbamoyl phosphate.,catalytic activity:Carbamoyl phosphate + L-aspartate = phosphate + N-carbamoyl-L-aspartate.,cofactor:Binds 1 zinc ion per subunit (for dihydroorotase activity) .,enzyme regulation:Allosterically regulated and controlled by phosphorylation. 5-phosphoribose 1-diphosphate is an activator while UMP is an inhibitor of the CPSase reaction.,function:This protein is a "fusion" protein encoding four enzymatic activities of the pyrimidine pathway (GATase, CPSase, ATCase and DHOase),miscellaneous:GATase (glutamine amidotransferase) and CPSase (carbamoyl phosphate synthase) form together the glutamine-dependent CPSase (GD-CPSase) (EC 6.3.5.5),online information:Aspartate carbamoyltransferase entry,pathway:Pyrimidine metabolism; UMP biosynthesis via de novo pathway; UMP from HCO(3)(-): step 1/6.,pathway:Pyrimidine metabolism; UMP biosynthesis via de novo pathway; UMP from HCO(3)(-): step 2/6.,pathway:Pyrimidine metabolism; UMP biosynthesis via de novo pathway; UMP from HCO(3)(-): step 3/6.,similarity:Belongs to the ATCase/OTCase family.,similarity:Contains 1 glutamine amidotransferase type-1 domain.,similarity:Contains 2 ATP-grasp domains.,similarity:In the central section; belongs to the DHOase family.,subunit:Homohexamer.,

研究领域 (Research Area)

Pyrimidine metabolism;Alanine; aspartate and glutamate metabolism;

图片 (Image Data)



Immunohistochemistry analysis of paraffin-embedded human colon carcinoma tissue, using CAD Antibody. The picture on the right is blocked with the synthesized peptide.

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注意事项 (Note)

For research use only .