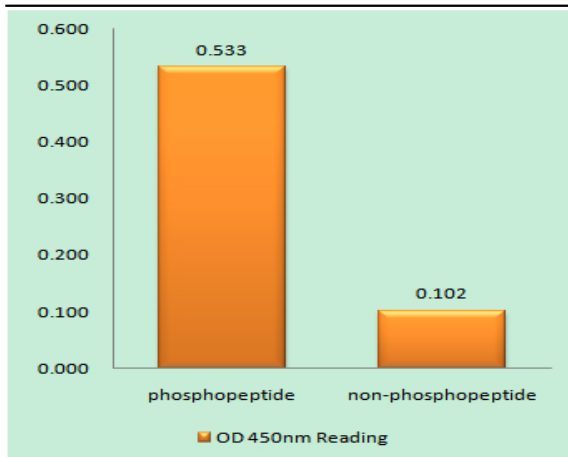


CAD (phospho Thr456) Polyclonal Antibody

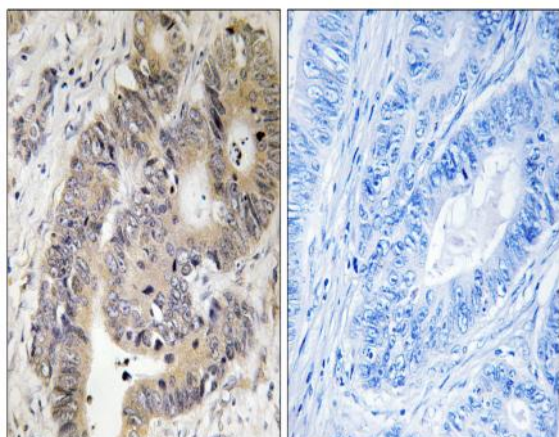
| | |
|------------------------------|---|
| Catalog No : | YP1083 |
| Reactivity : | Human;Mouse |
| Applications : | IHC;IF;ELISA |
| Target : | CAD |
| Fields : | >>Pyrimidine metabolism;>>Alanine, aspartate and glutamate metabolism;>>Metabolic pathways;>>Biosynthesis of cofactors |
| Gene Name : | CAD |
| Protein Name : | CAD protein |
| Human Gene Id : | 790 |
| Human Swiss Prot No : | P27708 |
| Immunogen : | The antiserum was produced against synthesized peptide derived from human CAD around the phosphorylation site of Thr456. AA range:422-471 |
| Specificity : | Phospho-CAD (T456) Polyclonal Antibody detects endogenous levels of CAD protein only when phosphorylated at T456. |
| Formulation : | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide. |
| Source : | Polyclonal, Rabbit,IgG |
| Dilution : | IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200 |
| Purification : | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. |
| Concentration : | 1 mg/ml |
| Storage Stability : | -15°C to -25°C/1 year(Do not lower than -25°C) |

| | |
|-------------------------------|---|
| Molecularweight : | 243kD |
| Cell Pathway : | Pyrimidine metabolism;Alanine; aspartate and glutamate metabolism; |
| Background : | <p>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],</p> |
| Function : | <p>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:Pyrimi</p> |
| Subcellular Location : | Cytoplasm . Nucleus . Cytosolic and unphosphorylated in resting cells, translocates to the nucleus in response to EGF stimulation, nuclear import promotes optimal cell growth. |
| Expression : | Colon adenocarcinoma,Epithe |
| Sort : | 3022 |
| No4 : | 1 |
| Host : | Rabbit |
| Modifications : | Phospho |

Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using CAD (Phospho-Thr456) Antibody



Immunohistochemistry analysis of paraffin-embedded human colon carcinoma, using CAD (Phospho-Thr456) Antibody. The picture on the right is blocked with the phospho peptide.