

Product datasheet for **AP55807PU-S**

CAD pThr456 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC
Recommended Dilution:	Immunohistochemistry on paraffin sections: 1:50~1:100.
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide sequence around phosphorylation site of threonine 456 (P-I-T(p)-P-H) derived from Human CAD (KLH-conjugated)
Specificity:	The antibody detects endogenous levels of CAD only when phosphorylated at threonine 456.
Formulation:	Rabbit IgG in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol State: Aff - Purified State: Liquid Ig fraction
Concentration:	lot specific
Purification:	Affinity chromatography using epitope-specific peptide
Conjugation:	Unconjugated
Storage:	Upon receipt, store undiluted (in aliquots) at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	242 kDa
Gene Name:	carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase
Database Link:	Entrez Gene 790 Human P27708



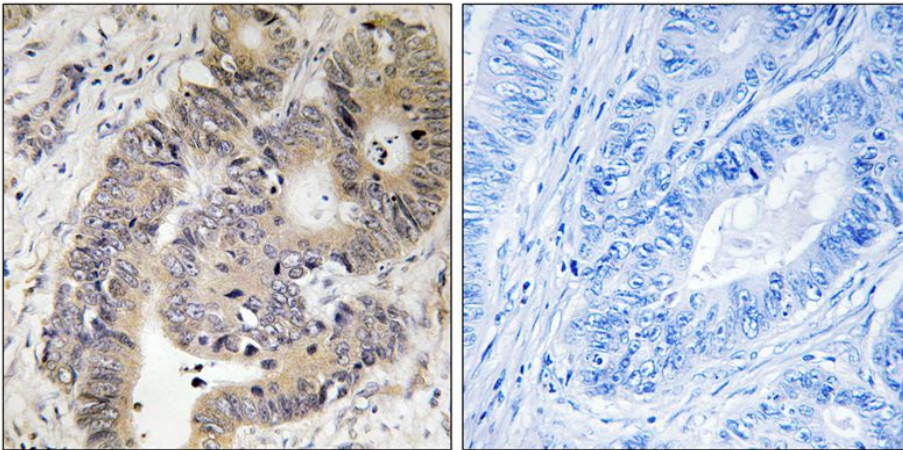
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Background:

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

Product images:

Immunohistochemical analysis of paraffin-embedded human colon carcinoma tissue using CAD (Phospho-Thr456) Antibody (left) or the same antibody preincubated with blocking peptide (right).