

## CAD (Phospho-Thr456) Antibody

Catalog No: #11789

Package Size: #11789-1 50ul #11789-2 100ul

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

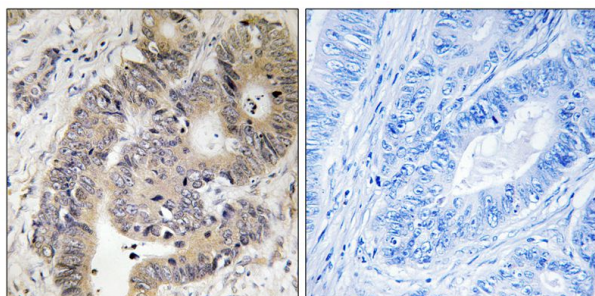
## Description

|                       |  |
|-----------------------|--|
| Product Name          | CAD (Phospho-Thr456) Antibody  |
| Host Species          | Rabbit   |
| Clonality             | Polyclonal   |
| Purification          | Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide. |
| Applications          | IHC  |
| Species Reactivity    | Hu   |
| Specificity           | The antibody detects endogenous levels of CAD only when phosphorylated at threonine 456.   |
| Immunogen Type        | Peptide-KLH  |
| Immunogen Description | Peptide sequence around phosphorylation site of threonine 456 (P-I-T(p)-P-H) derived from Human CAD.   |
| Target Name           | CAD  |
| Modification          | Phospho  |
| Other Names           | PYR1; CAD protein; EC 2.1.3.2; EC 3.5.2.3;   |
| Accession No.         | Swiss-Prot#: P27708; NCBI Gene#: 790; NCBI Protein#: NP_004332.2.  |
| Uniprot               | P27708   |
| GeneID                | 790;   |
| SDS-PAGE MW           | 242kd  |
| Concentration         | 1.0mg/ml   |
| Formulation           | Rabbit IgG in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.   |
| Storage               | Store at -20°C/1 year  |

## Application Details

Immunohistochemistry: 1:50~1:100

## Images



Immunohistochemical analysis of paraffin-embedded human colon carcinoma tissue using CAD (Phospho-Thr456) antibody #11789 (left) or the same antibody preincubated with blocking peptide (right).

## 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.

Iwahana H., *Biochem. Biophys. Res. Commun.* 219:249-255(1996).

Davidson J.N., *DNA Cell Biol.* 9:667-676(1990).

Olsen J.V., *Cell* 127:635-648(2006).

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Note: This product is for in vitro research use only