



Human CAD blocking peptide (CDBP0656)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	CAD (internal) peptide (mouse)
Antigen Description	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.
Species	Human
Conjugate	Unconjugated
Applications	BL, WB
Concentration	0.2 mg/ml
Size	50 µg
Buffer	PBS with 0.1% BSA 0.02% sodium azide pH7.2
Preservative	0.02% Sodium Azide
Storage	Upon Receipt - Keep as concentrated solution. Aliquot and store at -20°C or below. Avoid freeze-thaw cycles.

GENE INFORMATION

Gene Name	CAD carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase [Homo sapiens]
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Official Symbol	CAD
Synonyms	CAD; carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase; CAD protein; CAD trifunctional protein; multifunctional protein CAD;
Entrez Gene ID	790
mRNA Refseq	NM_004341
Protein Refseq	NP_004332
UniProt ID	P27708
Chromosome Location	2p22-p21
Pathway	Alanine, aspartate and glutamate metabolism, organism-specific biosystem; Alanine, aspartate and glutamate metabolism, conserved biosystem; Metabolic pathways, organism-specific biosystem; Metabolism, organism-specific biosystem; Metabolism of nucleotides, organism-specific biosystem; Pyrimidine biosynthesis, organism-specific biosystem; Pyrimidine metabolism, organism-specific biosystem;
Function	ATP binding; aspartate binding; aspartate carbamoyltransferase activity; aspartate carbamoyltransferase activity; carbamoyl-phosphate synthase (glutamine-hydrolyzing) activity; carbamoyl-phosphate synthase (glutamine-hydrolyzing) activity; dihydroorotase