



Human CAD blocking peptide (CDBP0657)

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

PRODUCT INFORMATION

Product Overview	DFF40 / CAD peptide (human)
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	Store at 4 °C, stable for one year.

GENE INFORMATION

Gene Name	CAD carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase [Homo sapiens]
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