

# **Product datasheet for CF812683**

# OriGene Technologies, Inc.

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### **CAD Mouse Monoclonal Antibody [Clone ID: OTI10A3]**

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI10A3

Applications: WB

Recommended Dilution: WB 1:250~500

Reactivity: Human, Mouse, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

**Immunogen:** Human recombinant protein fragment corresponding to amino acids 1918-2225 of human

CAD (NP\_004332) produced in E.coli.

**Formulation:** Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

**Reconstitution Method:** For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Gene Name:** carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase

Database Link: NP 004332

Entrez Gene 24240 RatEntrez Gene 69719 MouseEntrez Gene 790 Human

P27708





#### Background:

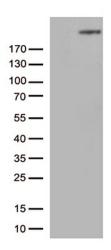
The de novo synthesis of pyrimidine nucleotides is required for mammalian cells to proliferate. This gene encodes a trifunctional protein which is associated with the enzymatic activities of the first 3 enzymes in the 6-step pathway of pyrimidine biosynthesis: carbamoylphosphate synthetase (CPS II), 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. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Apr 2015]

Synonyms: CDG1Z; DEE50; EIEE50; GATD4

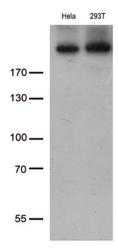
**Protein Families:** Druggable Genome

**Protein Pathways:** Alanine, aspartate and glutamate metabolism, Metabolic pathways, Pyrimidine metabolism

# **Product images:**



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY CAD ([RC209469], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CAD (1:500).



Western blot analysis of extracts (35ug) from 2 cell lines lysates by using anti-CAD monoclonal antibody (1:250).