

# DCI Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9230b

### **Product Information**

**Application** WB, E **Primary Accession** P42126 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB23475 **Calculated MW** 32816

## **Additional Information**

**Gene ID** 1632

Other Names Enoyl-CoA delta isomerase 1, mitochondrial, 2-trans-enoyl-CoA isomerase,

Delta(3), Delta(2)-enoyl-CoA isomerase, D3, D2-enoyl-CoA isomerase,

Dodecenoyl-CoA isomerase, ECI1, DCI

**Target/Specificity** This DCI antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide selected from the C-terminal region of human

DCI.

**Dilution** WB~~1:1000 E~~Use at an assay dependent concentration.

**Format** Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

**Storage** Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** DCI Antibody (C-term) is for research use only and not for use in diagnostic or

therapeutic procedures.

#### **Protein Information**

Name ECI1

**Synonyms** DCI

**Function** Key enzyme of fatty acid beta-oxidation (Probable). Able to isomerize both

3-cis (3Z) and 3-trans (3E) double bonds into the 2- trans (2E) form in a range

of enoyl-CoA species, with a preference for (3Z)-enoyl-CoAs over (3E)-enoyl-CoAs (By similarity) (PubMed: 7818490). The catalytic efficiency of this enzyme is not affected by the fatty acyl chain length (By similarity).

Cellular Location Mitochondrion matrix {ECO:0000250 | UniProtKB:P23965}

**Tissue Location** Expressed in liver (at protein level).

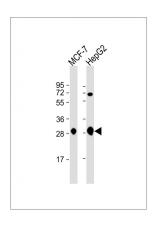
# **Background**

DCI encodes a member of the hydratase/isomerase superfamily. The protein encoded is a key mitochondrial enzyme involved in beta-oxidation of unsaturated fatty acids. It catalyzes the transformation of 3-cis and 3-trans-enoyl-CoA esters arising during the stepwise degradation of cis-, mono-, and polyunsaturated fatty acids to the 2-trans-enoyl-CoA intermediates.

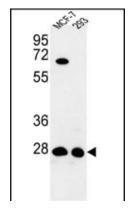
#### References

Partanen, S.T., et.al., J. Mol. Biol. 342 (4), 1197-1208 (2004) Wistow, G., et.al, Mol. Vis. 8, 171-184 (2002)

# **Images**



All lanes: Anti-DCI Antibody (C-term) at 1:1000 dilution Lane 1: MCF-7 whole cell lysate Lane 2: HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 33 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot analysis of DCI Antibody (C-term) (Cat. #AP9230b) in MCF-7, 293 cell line lysates (35ug/lane). DCI (arrow) was detected using the purified Pab.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.