

DCI Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8770b

Product Information

Application	IHC-P, FC, WB, E
Primary Accession	<u>P42126</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	32816
Antigen Region	275-302

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 between 275-302 amino acids from the C-terminal region of human DCI.
Dilution	IHC-P~~1:100~500 FC~~1:10~50 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: <u>7818490</u>). 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 is 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

Takahashi,Y., et.al., Biochem. J. 304 (PT 3), 849-852 (1994)

Images



Anti-DCI Antibody (C-term) at 1:1000 dilution + 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.



Formalin-fixed and paraffin-embedded human lung carcinoma reacted with DCI Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

DCI Antibody (C-term) (Cat. #AP8770b) flow cytometric analysis of MCF-7 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



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