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DCI Rabbit mAb

Catalog # AP75344

Product Information

Application	WB, IHC-P, FC
Primary Accession	P42126
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	32816

Additional Information

Gene ID	1632
Other Names	ECI1
Dilution	WB~~1:1000-1:5000 IHC-P~~N/A FC~~1:100-1:200
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

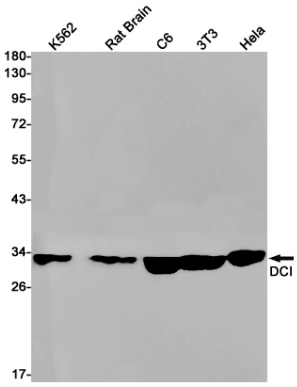
Name	ECI1
Synonyms	DCI
Function	Auxiliary enzyme in the beta-oxidation of mono- and polyunsaturated fatty acids (PubMed:26474213, PubMed:7818490). Together with the 2,4-dienoyl-CoA reductase (DECR) and the Delta(3,5)- Delta(2,4)-dienoyl-CoA isomerase (ECH1), they allow the reentrance of the enoyl-CoA into the beta-oxidation cycle (PubMed:26474213). Able to isomerize both 3-cis (3Z) and 3-trans (3E) double bonds into the 2- trans (2E) form in a range of fatty enoyl-CoA species, with a preference for (3Z)-enoyl-CoAs over (3E)-enoyl-CoAs (PubMed:26474213, PubMed:7818490). The catalytic efficiency of this enzyme is not affected by the fatty acyl chain length, and based on its established catalytic mechanism, it is predicted to act also on other fatty acids besides those tested experimentally (By similarity).
Cellular Location	Mitochondrion matrix {ECO:0000250|UniProtKB:P23965}

Tissue Location	Expressed in liver (at protein level).

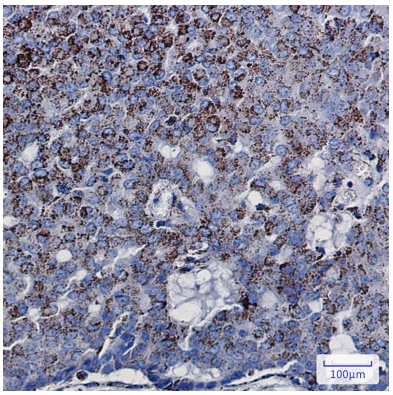
Background

This gene 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. Alternatively spliced transcript variants have been described.

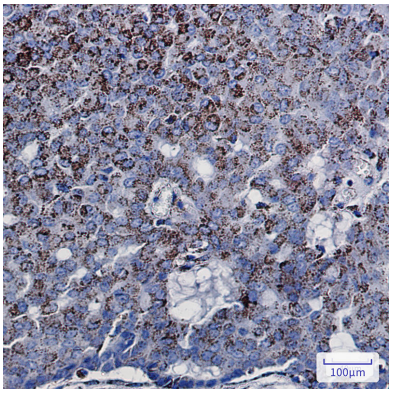
Images

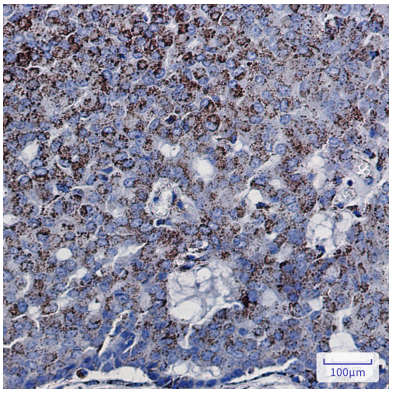


Western blot analysis of DCI in K562, rat Brain, C6, 3T3, Hela lysates using DCI antibody.



Immunohistochemistry analysis of paraffin-embedded Human breast cancer using DCI antibody.High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.





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