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# DCI Rabbit mAb

Catalog # AP75344

## Product Information

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|---|---|
| **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

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|---|---|
| **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

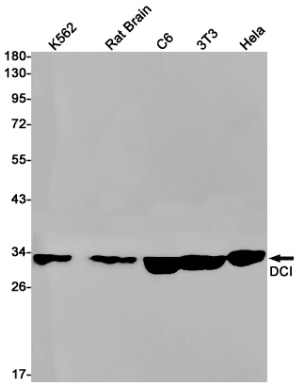
| | |
|---|---|
| **Name** | ECI1 |
| **Synonyms** | DCI |
| **Function** | Auxiliary enzyme in the beta-oxidation of mono- and polyunsaturated fatty acids (PubMed:26474213, PubMed:7818490). Together with the 2,4-dienoyl-CoA reductase (DECR) and the Delta(3,5)- Delta(2,4)-dienoyl-CoA isomerase (ECH1), 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} |

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

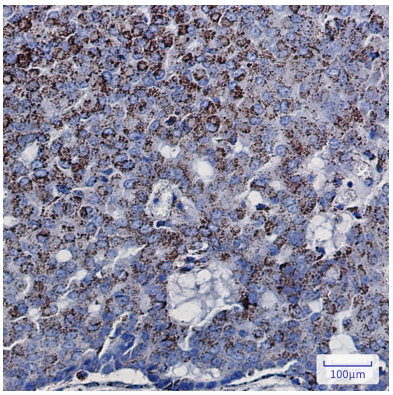
## Background

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.

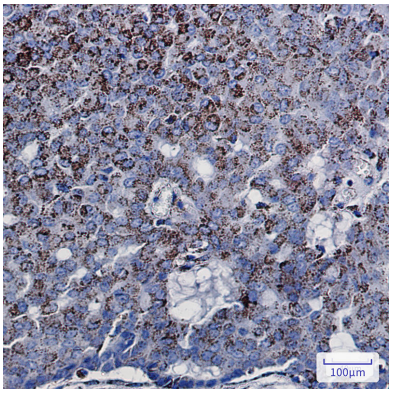
## Images

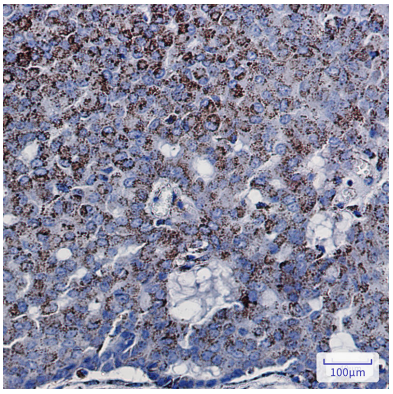



Western blot analysis of DCI in K562, rat Brain, C6, 3T3, Hela lysates using DCI antibody.




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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