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# ECH1 Rabbit pAb

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Catalog # AP55048

## Product Information

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| **Application** | IHC-P, IHC-F, IF |
| **Primary Accession** | Q13011 |
| **Reactivity** | Mouse |
| **Predicted** | Rat, Human |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 35816 |
| **Physical State** | Liquid |
| **Immunogen** | KLH conjugated synthetic peptide derived from human ECH1 |
| **Epitope Specificity** | 21-120/328 |
| **Isotype** | IgG |
| **Purity** | affinity purified by Protein A |
| **Buffer** | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| **SUBCELLULAR LOCATION** | Mitochondrion. Peroxisome. |
| **Important Note** | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| **Background Descriptions** | ECH1 is a 328 amino acid protein that localizes to both the mitochondrion and the peroxisome and belongs to the hydratase/isomerase superfamily. Existing as a homohexamer, ECH1 is involved in the fatty acid-beta oxidation pathway, specifically functioning to catalyze the isomerization of 3-trans,5-cis-dienoyl-CoA to 2-trans,4-trans-dienoyl-CoA. The gene encoding ECH1 maps to human chromosome 19, which is the genetic home for a number of immunoglobulin superfamily members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family and Fc receptors (FcRs). |

## Additional Information

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| **Gene ID** | 1891 |
| **Other Names** | Delta(3, 5)-Delta(2, 4)-dienoyl-CoA isomerase, mitochondrial, 5.3.3.21, ECH1 (HGNC:3149) |
| **Dilution** | IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 |
| **Storage** | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |

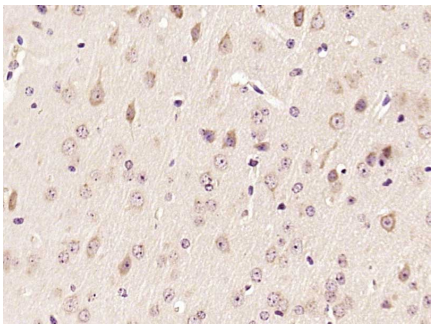
## Protein Information

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| **Name** | ECH1 ( HGNC:3149) |
| **Function** | Auxiliary enzyme in the beta-oxidation of mono- and polyunsaturated fatty acids (PubMed:26474213). Together with the 2,4- dienoyl-CoA reductase (DECR) and the Enoyl-CoA delta isomerase 1 (ECI1) they allow reentrance of the enoyl-CoA into the beta-oxidation cycle (PubMed:26474213). Able to isomerize 3-trans,5-cis-dienoyl-CoA (3E,5Z- dienoyl-CoA) to 2-trans,4-trans-dienoyl-CoA (2E,4E-dienoyl-CoA), a crucial step in the beta-oxidation of unsaturated fatty acids with double bonds at odd position (By similarity) (PubMed:26474213). Based on its established catalytic mechanism, it is predicted to act also on other fatty acids besides those tested experimentally (Probable). |
| **Cellular Location** | Mitochondrion {ECO:0000250\|UniProtKB:Q62651}. Peroxisome {ECO:0000250\|UniProtKB:Q62651} |

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## Images



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ECH1) Polyclonal Antibody, Unconjugated (AP55048) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

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