

ECHDC2 Antibody / Enoyl-CoA hydratase domain containing 2 Antibody (FY13672)

Catalog No.	Formulation	Size
FY13672	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

[Bulk quote request](#)

Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
UniProt	Q86YB7
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml ELISA : 0.1-0.5 ug/ml
Limitations	This ECHDC2 Antibody / Enoyl-CoA hydratase domain containing 2 Antibody is intended for research use only.

ECHDC2 Antibody by IHC in Human Liver Cancer Tissue. Immunohistochemistry analysis of ECHDC2 in a paraffin-embedded section of human liver cancer tissue using ECHDC2 Antibody. Brown DAB immunoreactivity is present in many tumor cells, predominantly in cytoplasmic regions, with heterogeneous intensity. Hematoxylin counterstaining reveals blue-purple nuclei and surrounding stromal elements. Heat-mediated antigen retrieval was performed using EDTA buffer at pH 8.0, followed by blocking with 10% goat serum. The section was incubated with 2 ug/ml primary antibody overnight at 4°C, followed by a peroxidase-conjugated secondary antibody and DAB detection. The Enoyl-CoA hydratase domain containing 2 Antibody staining is documented in this tumor section.

ECHDC2 Antibody by IHC in Human Prostate Cancer Tissue. Immunohistochemistry analysis of ECHDC2 expression in a paraffin-embedded human prostate cancer section using ECHDC2 Antibody. The image shows conspicuous brown DAB staining in a band of epithelial tumor cells lining a glandular or luminal structure, while the adjacent stromal region shows comparatively little labeling. Nuclei are counterstained blue with hematoxylin. The distribution of immunoreactivity is described from the visible section without assigning a specific intracellular organelle. This image provides tissue-level staining data for the Enoyl-CoA hydratase domain containing 2 Antibody in human prostate cancer.

ECHDC2 Antibody by WB in Rat and Mouse Tissue Lysates. Western blot analysis of ECHDC2 using ECHDC2 Antibody in four rodent tissues. Lanes 1-4 contain rat liver, rat heart, mouse liver and mouse heart lysates, respectively. The blot shows a strong band near 26-28 kDa in all four lanes, with an especially broad signal in the liver samples. Molecular weight markers are displayed alongside the lanes. The band position is consistent with the supplier-reported ECHDC2 immunoreactivity. This experiment documents antibody recognition in the tested tissues; the visible differences in band intensity should not be interpreted as quantitative differences in expression without loading normalization. The Enoyl-CoA hydratase domain containing 2 Antibody was used for detection.

Description

ECHDC2 Antibody / Enoyl-CoA hydratase domain containing 2 Antibody targets ECHDC2, a protein containing a domain related to the enoyl-CoA hydratase enzyme family. Members of this structural family participate in reactions involving activated organic acids, including metabolic pathways that process acyl-CoA intermediates. Enoyl-CoA hydratase-related folds can support different biochemical activities, so the presence of the domain does not by itself identify the physiological reaction catalyzed by ECHDC2.

Acyl-CoA metabolism connects fatty acid degradation, amino acid catabolism, and the processing of other carbon-containing molecules. In classical fatty acid beta-oxidation, an enoyl-CoA hydratase catalyzes hydration of a carbon-carbon double bond in an acyl-CoA intermediate. Related enzymes may act on structurally distinct substrates or participate in auxiliary pathways. For ECHDC2, substrate specificity and its precise place within cellular metabolic networks require direct biochemical characterization rather than assignment based solely on homology.

Metabolic enzymes can affect cellular physiology through changes in substrate availability, accumulation of intermediates, and redistribution of carbon between pathways. Altered expression of a hydratase-domain protein may therefore correlate with metabolic remodeling without demonstrating that the protein controls a particular pathway. Establishing localization, catalytic activity, and metabolite changes after perturbation is essential to connect ECHDC2 with a defined physiological function. Comparisons with other ECHDC-family proteins can help identify conserved features while also highlighting differences in their enzymatic responsibilities.

NSJ Bioreagents offers this ECHDC2 Antibody to support studies of ECHDC2 abundance and its possible involvement in acyl-CoA-associated metabolism. Determining its endogenous substrates and reaction products would provide a stronger foundation for understanding how this relatively understudied protein contributes to metabolic homeostasis.

Explore related research targets in our [Metabolism Antibody / Metabolism Antibodies](#) collection.

Application Notes

For best results, determine the optimal working dilution of the ECHDC2 Antibody / Enoyl-CoA hydratase domain containing 2 Antibody experimentally.

Immunogen

The ECHDC2 Antibody was generated using e. coli-derived human ECHDC2 recombinant protein (amino acids G37-K292).

Storage

After reconstitution, the ECHDC2 Antibody may be stored at 4oC for up to one month. For longer storage, aliquot and freeze at -20oC for up to six months. Avoid repeated freezing and thawing.

Alternate Names

ECHDC2 antibody, Enoyl-CoA hydratase domain-containing protein 2, mitochondrial antibody, Enoyl-CoA hydratase domain-containing protein 2 antibody, mitochondrial antibody, enoyl-CoA hydratase domain containing 2 antibody, ECHDC2 rabbit polyclonal antibody