

ECH1 (N-15): sc-167712

BACKGROUND

ECH1 (enoyl coenzyme A hydratase 1), also known as HPXEL, 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- β 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).

REFERENCES

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3. Davoli, R., et al. 2003. Radiation hybrid mapping of three skeletal muscle genes (CKM, ECH1 and TNNT1) to porcine chromosome 6. *Anim. Genet.* 34: 302-303.
4. Jia, Y., et al. 2003. Overexpression of peroxisome proliferator-activated receptor- α (PPAR α)-regulated genes in liver in the absence of peroxisome proliferation in mice deficient in both L- and D-forms of enoyl-CoA hydratase/dehydrogenase enzymes of peroxisomal β -oxidation system. *J. Biol. Chem.* 278: 47232-47239.
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6. Kovalyov, L.I., et al. 2006. Polymorphism of $\Delta^{3,5}$ - $\Delta^{2,4}$ -dienoyl-coenzyme A isomerase (the ECH1 gene product protein) in human striated muscle tissue. *Biochemistry Mosc.* 71: 448-453.
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CHROMOSOMAL LOCATION

Genetic locus: ECH1 (human) mapping to 19q13.2.

SOURCE

ECH1 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ECH1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-167712 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

ECH1 (N-15) is recommended for detection of ECH1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

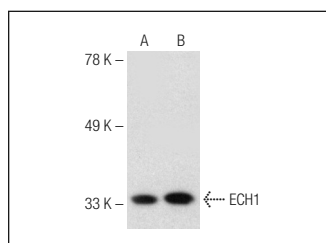
ECH1 (N-15) is also recommended for detection of ECH1 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for ECH1 siRNA (h): sc-97427, ECH1 shRNA Plasmid (h): sc-97427-SH and ECH1 shRNA (h) Lentiviral Particles: sc-97427-V.

Molecular Weight of ECH1 monomer: 35 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or HeLa whole cell lysate: sc-2200.

DATA



ECH1 (N-15): sc-167712. Western blot analysis of ECH1 expression in Hep G2 (A) and HeLa (B) whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **ECH1 (B-3): sc-515270**, our highly recommended monoclonal alternative to ECH1 (N-15).