## SANTA CRUZ BIOTECHNOLOGY, INC.

# ECHDC3 (E-13): sc-240341



## BACKGROUND

ECHDC3 (enoyl coenzyme A hydratase domain containing 3), also known as PP1494 or PP8332, is a 303 amino acid mitochondrial protein that is expressed as 2 alternatively spliced isoforms and is encoded by a gene which maps to human chromosome 10. Spanning nearly 135 million base pairs, chromosome 10 makes up approximately 4.5% of the total DNA in cells and encodes nearly 1,200 genes. Several protein-coding genes, including those that encode for chemokines, cadherins, excision repair proteins, early growth response factors (Egrs) and fibroblast growth receptors (FGFRs), are located on chromosome 10. Defects in some of the genes that map to chromosome 10 are associated with Charcot-Marie-Tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromatic deafness, Wolman's syndrome, Cowden syndrome, multiple endocrine neoplasia type 2 and porphyria.

## REFERENCES

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- Berger, P., et al. 2002. Molecular cell biology of Charcot-Marie-Tooth disease. Neurogenetics 4: 1-15.
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#### CHROMOSOMAL LOCATION

Genetic locus: ECHDC3 (human) mapping to 10p14.

#### SOURCE

ECHDC3 (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ECHDC3 of human origin.

#### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-240341 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

ECHDC3 (E-13) is recommended for detection of ECHDC3 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with ECHDC1 or ECHDC2.

Suitable for use as control antibody for ECHDC3 siRNA (h): sc-90758, ECHDC3 shRNA Plasmid (h): sc-90758-SH and ECHDC3 shRNA (h) Lentiviral Particles: sc-90758-V.

Molecular Weight (predicted) of ECHDC3: 30 kDa.

Molecular Weight (observed) of ECHDC3: 39 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

## **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluo-rescence: use donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## **RESEARCH USE**

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

#### PROTOCOLS

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