

DHDDS (S-18): sc-242574

BACKGROUND

DHDDS (dehydrodolichyl diphosphate synthase), also known as CIT, CPT, HDS or Dedol-PP synthase, is a 333 amino acid protein that catalyzes *cis*-prenyl chain elongation to form the polyprenyl backbone of dolichol. A member of the UPP synthase family, DHDDS is highly expressed in kidney and testis, with lower levels found in spleen, thymus and heart. DHDDS exists as three alternatively spliced isoforms and is encoded by a gene that maps to human chromosome 1p36.11. Human chromosome 1 spans 260 million base pairs, contains over 3,000 genes, comprises nearly 8% of the human genome and houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome.

REFERENCES

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3. Endo, S., et al. 2003. Identification of human dehydrodolichyl diphosphate synthase gene. *Biochim. Biophys. Acta* 1625: 291-295.
4. Online Mendelian Inheritance in Man, OMIM™. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 608172. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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7. Urov, Y.B., et al. 2008. The schizophrenia brain exhibits low-level aneuploidy involving chromosome 1. *Schizophr. Res.* 98: 139-147.
8. Yokoi, T., et al. 2009. Analysis of the vitreous membrane in a case of type 1 Stickler syndrome. *Graefes Arch. Clin. Exp. Ophthalmol.* 247: 715-718.
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CHROMOSOMAL LOCATION

Genetic locus: DHDDS (human) mapping to 1p36.11; Dhdds (mouse) mapping to 4 D3.

SOURCE

DHDDS (S-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DHDDS of human origin.

STORAGE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-242574 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DHDDS (S-18) is recommended for detection of DHDDS of mouse, rat and 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).

DHDDS (S-18) is also recommended for detection of DHDDS in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for DHDDS siRNA (h): sc-88357, DHDDS siRNA (m): sc-143026, DHDDS shRNA Plasmid (h): sc-88357-SH, DHDDS shRNA Plasmid (m): sc-143026-SH, DHDDS shRNA (h) Lentiviral Particles: sc-88357-V and DHDDS shRNA (m) Lentiviral Particles: sc-143026-V.

Molecular Weight of DHDDS isoforms: 39/39/34 kDa.

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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or 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.