

DHCR7 (N-12): sc-48481



The Power to Question

BACKGROUND

Dehydrocholesterol reductase (DHCR) proteins are involved in cholesterol biosynthesis. DHCR7, also designated sterol δ -7-reductase or 7-DHC reductase, reduces the C7-C8 double bond of 7-dehydrocholesterol. It is a multi-pass membrane protein localizing to the endoplasmic reticulum (ER). Defects in the DHCR7 gene can cause smith-lemli-opitz syndrome (SLOS), an autosomal recessive disorder of sterol metabolism. DHCR24 acts as a catalyst for the reduction of the δ -24 double bond of sterol intermediates. DHCR24, also designated 3- β -hydroxysterol δ -24-reductase or seladin-1, binds to FAD and is predominantly expressed in adrenal gland and brain. It is a single-pass membrane protein localizing to the ER or Golgi apparatus. Defects in the DHCR24 gene cause the autosomal recessive disorder desmosterolosis.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: DHCR7 (human) mapping to 11q13.4; Dhcr7 (mouse) mapping to 7 F5.

SOURCE

DHCR7 (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of DHCR7 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-48481 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DHCR7 (N-12) is recommended for detection of DHCR7 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).

DHCR7 (N-12) is also recommended for detection of DHCR7 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for DHCR7 siRNA (h): sc-60533, DHCR7 siRNA (m): sc-60534, DHCR7 shRNA Plasmid (h): sc-60533-SH, DHCR7 shRNA Plasmid (m): sc-60534-SH, DHCR7 shRNA (h) Lentiviral Particles: sc-60533-V and DHCR7 shRNA (m) Lentiviral Particles: sc-60534-V.

Molecular Weight of DHCR7: 54 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.

STORAGE

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

RESEARCH USE

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