

ALDH9A1 (C-17): sc-104038

BACKGROUND

Aldehyde dehydrogenases (ALDHs) mediate the NADP⁺-dependent oxidation of aldehydes into acids and play an important role in the detoxification of alcohol-derived acetaldehyde, as well as in lipid peroxidation and in the metabolism of corticosteroids, biogenic amines and neurotransmitters. ALDH9A1 (aldehyde dehydrogenase family 9 member A1), also known as E3, ALDH4, ALDH7, ALDH9 or TMABADH, is a 494 amino acid cytoplasmic protein that is highly expressed in adult liver, skeletal muscle, kidney and embryonic brain. ALDH9A1 converts γ -trimethylaminobutyraldehyde into γ -butyrobetaine and catalyzes the irreversible oxidation of a broad range of aldehydes to the corresponding acids in a NAD-dependent reaction.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ALDH9A1 (human) mapping to 1q24.1; Aldh9a1 (mouse) mapping to 1 H2.3.

SOURCE

ALDH9A1 (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ALDH9A1 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-104038 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

ALDH9A1 (C-17) is recommended for detection of ALDH9A1 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); non cross-reactive with other ALDH family members.

ALDH9A1 (C-17) is also recommended for detection of ALDH9A1 in additional species, including porcine.

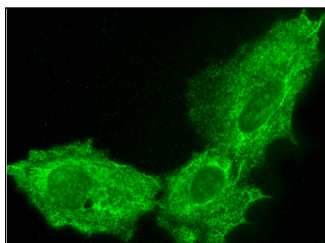
Suitable for use as control antibody for ALDH9A1 siRNA (h): sc-88344, ALDH9A1 siRNA (m): sc-105052, ALDH9A1 shRNA Plasmid (h): sc-88344-SH, ALDH9A1 shRNA Plasmid (m): sc-105052-SH, ALDH9A1 shRNA (h) Lentiviral Particles: sc-88344-V and ALDH9A1 shRNA (m) Lentiviral Particles: sc-105052-V.

Molecular Weight of ALDH9A1: 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.

DATA



ALDH9A1 (C-17): sc-104038. Immunofluorescence staining of formalin-fixed Hep G2 cells showing cytoplasmic localization.

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.