

ALDH6A1 (H-178): sc-292507

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. ALDH6A1 (aldehyde dehydrogenase family 6 member A1), also known as MMSDH or MMSADHA, is a 535 amino acid mitochondrial protein that belongs to the aldehyde dehydrogenase family. Considered a mitochondrial methylmalonate semialdehyde dehydrogenase, ALDH6A1 catalyzes the irreversible oxidative decarboxylation of malonate and methylmalonate semialdehydes to acetyl- and propionyl-CoA. It is suggested that ALDH6A1 plays a role in the valine and pyrimidine catabolic pathways.

CHROMOSOMAL LOCATION

Genetic locus: ALDH6A1 (human) mapping to 14q24.3; Aldh6a1 (mouse) mapping to 12 D1.

SOURCE

ALDH6A1 (H-178) is a rabbit polyclonal antibody raised against amino acids 181-358 mapping within an internal region of ALDH6A1 of human origin.

PRODUCT

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

STORAGE

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

APPLICATIONS

ALDH6A1 (H-178) is recommended for detection of ALDH6A1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ALDH6A1 (H-178) is also recommended for detection of ALDH6A1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for ALDH6A1 siRNA (h): sc-92361, ALDH6A1 siRNA (m): sc-141004, ALDH6A1 shRNA Plasmid (h): sc-92361-SH, ALDH6A1 shRNA Plasmid (m): sc-141004-SH, ALDH6A1 shRNA (h) Lentiviral Particles: sc-92361-V and ALDH6A1 shRNA (m) Lentiviral Particles: sc-141004-V.

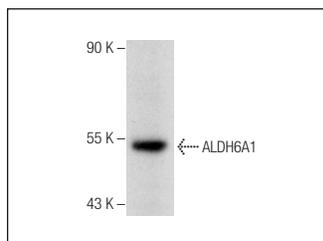
Molecular Weight of ALDH6A1: 58 kDa.

Positive Controls: mouse liver extract: sc-2256 or Hep G2 cell lysate: sc-2227.

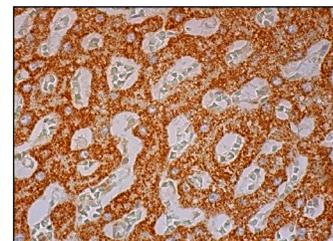
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



ALDH6A1 (H-178): sc-292507. Western blot analysis of ALDH6A1 expression in mouse liver tissue extract.



ALDH6A1 (H-178): sc-292507. Immunoperoxidase staining of formalin fixed, paraffin-embedded human liver tissue showing cytoplasmic staining of hepatocytes.

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.

MONOS
Satisfaction
Guaranteed

Try **ALDH6A1 (C-9): sc-271582** or **ALDH6A1 (A-6): sc-514509**, our highly recommended monoclonal alternatives to ALDH6A1 (H-178).