

L-serine dehydratase (Q-14): sc-168394

BACKGROUND

L-serine dehydratase, also known as SDS, is a 328 amino acid cytoplasmic protein that exists as a homodimer and belongs to the serine/threonine dehydratase family. The gene that encodes L-serine dehydratase consists of approximately 11,444 bases and maps to human chromosome 12q24.13. Encoding over 1,100 genes within 132 million bases, chromosome 12 makes up about 4.5% of the human genome. A number of skeletal deformities are linked to chromosome 12, including hypochondrogenesis, achondrogenesis and Kniest dysplasia. Noonan syndrome, which includes heart and facial developmental defects among the primary symptoms, is caused by a mutant form of PTPN11 gene product, SH-PTP2. Chromosome 12 is also home to a homeobox gene cluster, which encodes crucial transcription factors for morphogenesis, and the natural killer complex gene cluster, encoding C-type lectin proteins which mediate the NK cell response to MHC I interaction.

REFERENCES

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RESEARCH USE

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

CHROMOSOMAL LOCATION

Genetic locus: SDS (human) mapping to 12q24.13; Sds (mouse) mapping to 5 F.

SOURCE

L-serine dehydratase (Q-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of L-serine dehydratase 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.

Blocking peptide available for competition studies, sc-168394 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

L-serine dehydratase (Q-14) is recommended for detection of L-serine dehydratase 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).

L-serine dehydratase (Q-14) is also recommended for detection of L-serine dehydratase in additional species, including canine and bovine.

Suitable for use as control antibody for L-serine dehydratase siRNA (h): sc-96226, L-serine dehydratase siRNA (m): sc-146616, L-serine dehydratase shRNA Plasmid (h): sc-96226-SH, L-serine dehydratase shRNA Plasmid (m): sc-146616-SH, L-serine dehydratase shRNA (h) Lentiviral Particles: sc-96226-V and L-serine dehydratase shRNA (m) Lentiviral Particles: sc-146616-V.

Molecular Weight of L-serine dehydratase: 35 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.

PROTOCOLS

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