SANTA CRUZ BIOTECHNOLOGY, INC.

ASPDH (L-18): sc-241844

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The Power to Question

BACKGROUND

ASPDH (aspartate dehydrogenase domain containing), also known as putative L-aspartate dehydrogenase, is a 283 amino acid belonging to the L-aspartate dehydrogenase family. ASPDH participates in NADP and NADPH binding, as well as aspartate dehydrogenase and oxidoreductase activities. ASPDH catalyzes NAD and NADP-dependent dehydrogenation of L-aspartate to iminoaspartate, resulting in an unstable iminoaspartate product, which can decompose to oxaloacetate and ammonia. Existing as two alternatively spliced isoforms, ASPDH is encoded by a gene that maps to human chromosome 19q13.33. Chromosome 19 makes up over 2% of the human genome and contains approximately 63 million bases, which encode over 1,400 genes. Recognized for having the greatest gene density of all human chromosomes, chromosome 19 is linked to Peutz-Jeghers syndrome, spinocerebellar ataxia type 6, the stroke disorder CADASIL, hypercholesterolemia and Insulin-dependent diabetes. Translocation of chromosomes 19 and 14 may be related to lymphoproliferative disorders.

REFERENCES

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3. Buchet-Poyau, K., et al. 2002. Search for the second Peutz-Jeghers syndrome locus: exclusion of the STK13, PRKCG, KLK10, and PSCD2 genes on chromosome 19 and the STK11IP gene on chromosome 2. Cytogenet. Genome Res. 97: 171-178.
4. Moodie, S.J., et al. 2002. Analysis of candidate genes on chromosome 19 in coeliac disease: an association study of the KIR and LILR gene clusters. Eur. J. Immunogenet. 29: 287-291.
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7. Vikelis, M., et al. 2007. A novel CADASIL-causing mutation in a stroke patient. Swiss Med. Wkly. 137: 323-325.
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CHROMOSOMAL LOCATION

Genetic locus: ASPDH (human) mapping to 19q13.33; Aspdh (mouse) mapping to 7 B4.

SOURCE

ASPDH (L-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ASPDH 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-241844 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ASPDH (L-18) is recommended for detection of ASPDH 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).

ASPDH (L-18) is also recommended for detection of ASPDH in additional species, including bovine, porcine and canine.

Suitable for use as control antibody for ASPDH siRNA (h): sc-97089, ASPDH siRNA (m): sc-108114, ASPDH shRNA Plasmid (h): sc-97089-SH, ASPDH shRNA Plasmid (m): sc-108114-SH, ASPDH shRNA (h) Lentiviral Particles: sc-97089-V and ASPDH shRNA (m) Lentiviral Particles: sc-108114-V.

Molecular Weight of ASPDH: 30 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.

PROTOCOLS

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