

DUS4L (D-14): sc-162752

BACKGROUND

DUS4L (tRNA-dihydrouridine synthase 4-like), also known as DUS4 or PP35, is a 317 amino acid member of the DUS protein family. Utilizing FAD as a cofactor, DUS4L catalyzes the synthesis of dihydrouridine, a modified base found in the D-loop of most tRNAs. DUS4L is expressed as two isoforms produced by alternative splicing events and is encoded by a gene mapping to human chromosome 7. Chromosome 7 is about 158 million bases long, encodes over 1,000 genes and makes up about 5% of the human genome. Chromosome 7 has been linked to osteogenesis imperfecta, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome. The deletion of a portion of the q arm of chromosome 7 is associated with Williams-Beuren syndrome, a condition characterized by mild mental retardation, an unusual comfort and friendliness with strangers and an elfin appearance. Deletions of portions of the q arm of chromosome 7 are also seen in a number of myeloid disorders including cases of acute myelogenous leukemia and myelodysplasia.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: DUS4L (human) mapping to 7q22.3; Dus4l (mouse) mapping to 12 A3.

SOURCE

DUS4L (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DUS4L 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-162752 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DUS4L (D-14) is recommended for detection of DUS4L 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).

DUS4L (D-14) is also recommended for detection of DUS4L in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for DUS4L siRNA (h): sc-89767, DUS4L siRNA (m): sc-143194, DUS4L shRNA Plasmid (h): sc-89767-SH, DUS4L shRNA Plasmid (m): sc-143194-SH, DUS4L shRNA (h) Lentiviral Particles: sc-89767-V and DUS4L shRNA (m) Lentiviral Particles: sc-143194-V.

Molecular Weight of DUS4L isoforms: 36/22 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.