

DUS2L (Q-16): sc-164239

BACKGROUND

DUS2L (tRNA-dihydrouridine synthase 2-like), also known as URLC8 (up-regulated in lung cancer protein 8) or SMM1, is a 493 amino acid member of the DUS protein family. Localized to cytoplasm and endoplasmic reticulum, DUS2L uses FAD as a cofactor to catalyze the synthesis of dihydrouridine, a modified base found in the D-loop of most tRNAs. DUS2L contains one DRBM (double-stranded RNA-binding) domain and has been found to interact with ProRS. DUS2L is upregulated in most lung cancer cells and has weak expression in normal heart, skeletal muscle and placenta. The gene that encodes DUS2L maps to human chromosome 16q22.1 and murine chromosome 8 D3.

REFERENCES

1. Xing, F., et al. 2002. A conserved family of *Saccharomyces cerevisiae* synthases effects dihydrouridine modification of tRNA. *RNA* 8: 370-381.
2. Kato, T., et al. 2005. A novel human tRNA-dihydrouridine synthase involved in pulmonary carcinogenesis. *Cancer Res.* 65: 5638-5646.
3. Lamesch, P., et al. 2007. hORFeome v3.1: a resource of human open reading frames representing over 10,000 human genes. *Genomics* 89: 307-315.
4. Mittelstadt, M., et al. 2008. Interaction of human tRNA-dihydrouridine synthase-2 with interferon-induced protein kinase PKR. *Nucleic Acids Res.* 36: 998-1008.
5. Hendrickson, S.L., et al. 2010. Genetic variants in nuclear-encoded mitochondrial genes influence AIDS progression. *PLoS ONE* 5: e12862.

CHROMOSOMAL LOCATION

Genetic locus: DUS2L (human) mapping to 16q22.1; Dus2l (mouse) mapping to 8 D3.

SOURCE

DUS2L (Q-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of DUS2L 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-164239 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

DUS2L (Q-16) is recommended for detection of DUS2L 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).

DUS2L (Q-16) is also recommended for detection of DUS2L in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for DUS2L siRNA (h): sc-93446, DUS2L siRNA (m): sc-143192, DUS2L shRNA Plasmid (h): sc-93446-SH, DUS2L shRNA Plasmid (m): sc-143192-SH, DUS2L shRNA (h) Lentiviral Particles: sc-93446-V and DUS2L shRNA (m) Lentiviral Particles: sc-143192-V.

Molecular Weight of DUS2L: 55 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.

RESEARCH USE

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