

DUS1L (Q-12): sc-136656

BACKGROUND

DUS1L (dihydrouridine synthase 1-like), also known as tRNA-dihydrouridine synthase 1-like, DUS1 or PP3111, is a 473 amino acid protein belonging to the DUS family and DUS1 subfamily that catalyzes the synthesis of dihydrouridine, a modified base located in the D-loop of many tRNAs. DUS1L binds FAD as a cofactor and is encoded by a gene located on human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1. Tumor suppressor p53 is necessary for maintenance of cellular genetic integrity by moderating cell fate through DNA repair versus cell death. Malfunction or loss of p53 expression is associated with malignant cell growth and Li-Fraumeni syndrome. Like p53, BRCA1 is directly involved in DNA repair, though specifically it is recognized as a genetic determinant of early onset breast cancer and predisposition to cancers of the ovary, colon, prostate gland and fallopian tubes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: DUS1L (human) mapping to 17q25.3; Dus1l (mouse) mapping to 11 E2.

SOURCE

DUS1L (Q-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of DUS1L of human origin.

RESEARCH USE

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

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-136656 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DUS1L (Q-12) is recommended for detection of DUS1L 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

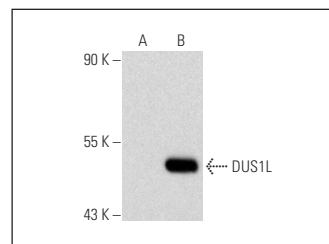
DUS1L (Q-12) is also recommended for detection of DUS1L in additional species, including equine and canine.

Suitable for use as control antibody for DUS1L siRNA (h): sc-93663, DUS1L siRNA (m): sc-143191, DUS1L shRNA Plasmid (h): sc-93663-SH, DUS1L shRNA Plasmid (m): sc-143191-SH, DUS1L shRNA (h) Lentiviral Particles: sc-93663-V and DUS1L shRNA (m) Lentiviral Particles: sc-143191-V.

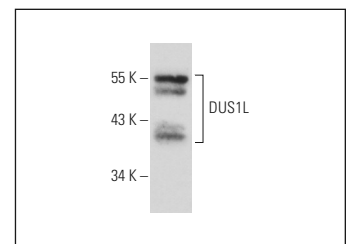
Molecular Weight of DUS1L: 53 kDa.

Positive Controls: mouse liver extract: sc-2256, DUS1L (h2): 293T Lysate: sc-116777 or HeLa whole cell lysate: sc-2200.

DATA



DUS1L (Q-12): sc-136656. Western blot analysis of DUS1L expression in non-transfected: sc-117752 (A) and human DUS1L transfected: sc-116777 (B) 293T whole cell lysates.



DUS1L (Q-12): sc-136656. Western blot analysis of DUS1L expression in mouse liver tissue extract.

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.