DDX59 (D-13): sc-104191

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BACKGROUND

DEAD-box proteins, characterized by the conserved motif Asp-Glu-Ala-Asp, are putative RNA helicases implicated in several cellular processes involving modifications of RNA secondary structure and ribosome/spliceosome assembly. Based on their distribution patterns, some members of this family may be involved in embryogenesis, spermatogenesis, and cellular growth and division. DDX59 (DEAD box protein 59), also known as ZNHIT5 (zinc finger HIT domain-containing protein 5), is a 619 amino acid member of the DEAD box helicase protein family. Like many DEAD box helicase family members, DDX59 contains a Q motif, which controls ATP binding and hydrolysis. Expressed as two isoforms produced by alternative splicing, DDX59 contains one helicase C-terminal domain and one HIT-type zinc finger.

REFERENCES

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3. Tanner, N.K. and Linder, P. 2001. DExD/H box RNA helicases: from generic motors to specific dissociation functions. Mol. Cell 8: 251-262.

4. Xu, J., Wu, H., Zhang, C., Cao, Y., Wang, L., Zeng, L., Ye, X., Wu, Q., Dai, J., Xie, Y. and Mao, Y. 2002. Identification of a novel human DDX40 gene, a new member of the DEAH-box protein family. J. Hum. Genet. 47: 681-683.

5. Abdelhaleem, M., Maltais, L. and Wain, H. 2003. The human DDX and DHX gene families of putative RNA helicases. Genomics 81: 618-622.

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CHROMOSOMAL LOCATION

Genetic locus: DDX59 (human) mapping to 1q32.1; Ddx59 (mouse) mapping to 1 F.

SOURCE

DDX59 (D-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DDX59 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-104191 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.

APPLICATIONS

DDX59 (D-13) is recommended for detection of DDX59 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); non cross-reactive with other DDX family members.

Suitable for use as control antibody for DDX59 siRNA (h): sc-88841, DDX59 siRNA (m): sc-105282, DDX59 shRNA Plasmid (h): sc-88841-SH, DDX59 shRNA Plasmid (m): sc-105282-SH, DDX59 shRNA (h) Lentiviral Particles: sc-88841-V and DDX59 shRNA (m) Lentiviral Particles: sc-105282-V.

Molecular Weight of DDX59: 69 kDa.

Positive Controls: HeLa nuclear extract: sc-2120.

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.

PROTOCOLS

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