

DDX49 (C-11): sc-514928

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. DDX49 (DEAD-box protein 49) is a 483 amino acid protein that contains one helicase ATP-binding domain and one helicase C-terminal domain. One of several members of the DEAD-box protein family, DDX49 may function as an RNA helicase that is involved in pre-mRNA splicing events.

REFERENCES

1. Maruyama, K., et al. 1994. Oligo-capping: a simple method to replace the cap structure of eukaryotic mRNAs with oligoribonucleotides. *Gene* 138: 171-174.
2. Andersen, J.S., et al. 2002. Directed proteomic analysis of the human nucleolus. *Curr. Biol.* 12: 1-11.
3. Abdelhaleem, M., et al. 2003. The human DDX and DHX gene families of putative RNA helicases. *Genomics* 81: 618-622.
4. Abdelhaleem, M. 2004. Overexpression of RNA helicases in cancer. *Anticancer Res.* 24: 3951-3953.
5. Abdelhaleem, M. 2005. RNA helicases: regulators of differentiation. *Clin. Biochem.* 38: 499-503.

CHROMOSOMAL LOCATION

Genetic locus: DDX49 (human) mapping to 19p13.11; Ddx49 (mouse) mapping to 8 B3.3.

SOURCE

DDX49 (C-11) is a mouse monoclonal antibody raised against amino acids 2-202 mapping near the N-terminus of DDX49 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

DDX49 (C-11) is available conjugated to agarose (sc-514928 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514928 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514928 PE), fluorescein (sc-514928 FITC), Alexa Fluor® 488 (sc-514928 AF488), Alexa Fluor® 546 (sc-514928 AF546), Alexa Fluor® 594 (sc-514928 AF594) or Alexa Fluor® 647 (sc-514928 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514928 AF680) or Alexa Fluor® 790 (sc-514928 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

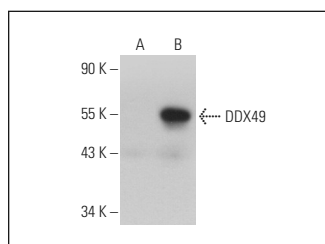
DDX49 (C-11) is recommended for detection of DDX49 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for DDX49 siRNA (h): sc-97556, DDX49 siRNA (m): sc-142941, DDX49 shRNA Plasmid (h): sc-97556-SH, DDX49 shRNA Plasmid (m): sc-142941-SH, DDX49 shRNA (h) Lentiviral Particles: sc-97556-V and DDX49 shRNA (m) Lentiviral Particles: sc-142941-V.

Molecular Weight of DDX49: 54 kDa.

Positive Controls: DDX49 (h2): 293T Lysate: sc-371464.

DATA



DDX49 (C-11): sc-514928. Western blot analysis of DDX49 expression in non-transfected: sc-117752 (A) and human DDX49 transfected: sc-371464 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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