

DDX49 (T-13): sc-132650

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.
6. Fachin, A.L., et al. 2007. Gene expression profiles in human lymphocytes irradiated *in vitro* with low doses of gamma rays. *Radiat. Res.* 168: 650-665.

CHROMOSOMAL LOCATION

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

SOURCE

DDX49 (T-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DDX49 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-132650 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

DDX49 (T-13) is recommended for detection of DDX49 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); non cross-reactive with other DDX family members.

DDX49 (T-13) is also recommended for detection of DDX49 in additional species, including porcine.

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.

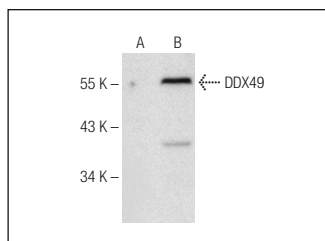
Molecular Weight of DDX49: 54 kDa.

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

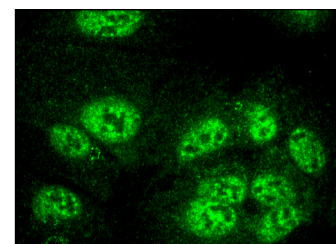
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



DDX49 (T-13): sc-132650. Western blot analysis of DDX49 expression in non-transfected: sc-117752 (A) and human DDX49 transfected: sc-371464 (B) 293T whole cell lysates.



DDX49 (T-13): sc-132650. Immunofluorescence staining of formalin-fixed HepG2 cells showing nuclear localization.

RESEARCH USE

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

MONOS
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Try **DDX49 (C-11): sc-514928**, our highly recommended monoclonal alternative to DDX49 (T-13).