

# DDX49 (Y-22): sc-101935

## 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

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3. Abdelhaleem, M., Maltais, L. and Wain, H. 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., Mello, S.S., Sandrin-Garcia, P., Junta, C.M., Donadi, E.A., Passos, G.A. and Sakamoto-Hojo, E.T. 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 (Y-22) is a purified rabbit polyclonal antibody raised against DDX49 of human origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

DDX49 (Y-22) is recommended for detection of DDX49 of mouse, human and dog origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

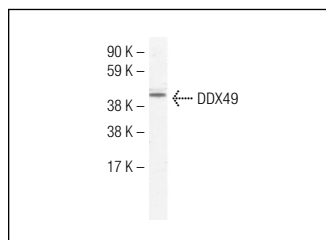
Suitable for use as control antibody for DDX49 siRNA (h): sc-97556, DDX49 siRNA (m): sc-142941, DDX49 shRNA Plasmid (h): sc-97556-SH, DDX49 shRNA Plasmid (m): sc-142941-SH, DDX49 shRNA (h) Lentiviral Particles: sc-97556-V and DDX49 shRNA (m) Lentiviral Particles: sc-142941-V.

Molecular Weight of DDX49: 54 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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).

## DATA



DDX49 (Y-22): sc-101935. Western blot analysis of DDX49 expression in fetal thymus tissue extract.

## RESEARCH USE

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