

DDX24 (E-15): sc-104864

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. DDX24 (DEAD (Asp-Glu-Ala-Asp) box polypeptide 24) is an 859 amino acid protein that contains one helicase C-terminal domain and one helicase ATP-binding domain. Expressed ubiquitously with highest levels in brain and heart, DDX24 functions as an ATP-dependent RNA helicase that is subject to DNA damage-dependent phosphorylation. Human DDX24 shares 79% sequence similarity with its mouse counterpart, suggesting a conserved role between species.

REFERENCES

- Schmid, S.R. and Linder, P. 1992. DEAD protein family of putative RNA helicases. *Mol. Microbiol.* 6: 283-291.
- Zhao, Y., et al. 2000. Cloning and characterization of human DDX24 and mouse Ddx24, two novel putative DEAD box proteins, and mapping DDX24 to human chromosome 14q32. *Genomics* 67: 351-355.
- Abdelhaleem, M., et al. 2003. The human DDX and DHX gene families of putative RNA helicases. *Genomics* 81: 618-622.
- Cordin, O., et al. 2004. The newly discovered Q motif of DEAD-box RNA helicases regulates RNA-binding and helicase activity. *EMBO J.* 23: 2478-2487.
- Online Mendelian Inheritance in Man, OMIM™. 2004. Johns Hopkins University, Baltimore, MD. MIM Number: 606181. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Linder, P. 2006. DEAD-box proteins: a family affair—active and passive players in RNP-remodeling. *Nucleic Acids Res.* 34: 4168-4180.

CHROMOSOMAL LOCATION

Genetic locus: DDX24 (human) mapping to 14q32.12; Ddx24 (mouse) mapping to 12 E.

SOURCE

DDX24 (E-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of DDX24 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-104864 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

DDX24 (E-15) is recommended for detection of DDX24 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.

Suitable for use as control antibody for DDX24 siRNA (h): sc-92079, DDX24 siRNA (m): sc-142926, DDX24 shRNA Plasmid (h): sc-92079-SH, DDX24 shRNA Plasmid (m): sc-142926-SH, DDX24 shRNA (h) Lentiviral Particles: sc-92079-V and DDX24 shRNA (m) Lentiviral Particles: sc-142926-V.

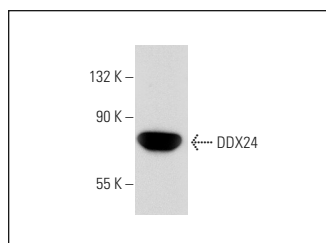
Molecular Weight of DDX24: 96 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

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



DDX24 (E-15): sc-104864. Western blot analysis of DDX24 expression in HeLa whole cell lysate.

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.