

DDX15 (C-16): sc-67547

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. DDX15 (DEAH-box protein 15), also known as DHX15, DBP1 or HRH2, is a nuclear ATP-dependent RNA helicase that is involved in pre-mRNA splicing and is a member of the DEAH-box subfamily of DEAD-box proteins. Expressed throughout the body, DDX15 is a pre-mRNA processing factor that plays a role in spliceosome disassembly after the release of mature mRNA. When localized to the nucleoli, DDX15 is thought to interact with the La/SSB autoantigen, an RNA chaperone that functions in various intracellular processes. DDX15 is 795 amino acids in length and is the human ortholog of the *S. cerevisiae* protein Prp43.

REFERENCES

1. Imamura, O., Sugawara, M. and Furuichi, Y. 1997. Cloning and characterization of a putative human RNA helicase gene of the DEAH-box protein family. *Biochem. Biophys. Res. Commun.* 240: 335-340.
2. Ji, W., Chen, F., Do, T., Do, A., Roe, B.A. and Meister, M.H. 2001. DDX1, an RNA-dependent ATPase homolog with a novel DEAH box: expression pattern and genomic sequence comparison of the human and mouse genes. *Mamm. Genome* 12: 456-461.
3. Abdelhaleem, M. 2002. The novel helicase homologue DDX32 is down-regulated in acute lymphoblastic leukemia. *Leuk. Res.* 26: 945-954.
4. Fouraux, M.A., Kolkman, M.J., Van der Heijden, A., De Jong, A.S., Van Venrooij, W.J. and Pruijn, G.J. 2002. The human La (SS-B) autoantigen interacts with DDX15/hPrp43, a putative DEAH-box RNA helicase. *RNA* 8: 1428-1443.
5. Online Mendelian Inheritance in Man, OMIM[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 603403. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: DHX15 (human) mapping to 4p15.2; Dhx15 (mouse) mapping to 5 C1.

SOURCE

DDX15 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of DDX15 of human origin.

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.

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-67547 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DDX15 (C-16) is recommended for detection of DEAH box protein 15 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).

DDX15 (C-16) is also recommended for detection of DEAH box protein 15 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for DDX15 siRNA (h): sc-62198, DDX15 siRNA (m): sc-62199, DDX15 shRNA Plasmid (h): sc-62198-SH, DDX15 shRNA Plasmid (m): sc-62199-SH, DDX15 shRNA (h) Lentiviral Particles: sc-62198-V and DDX15 shRNA (m) Lentiviral Particles: sc-62199-V.

Molecular Weight of DDX15: 92 kDa.

Positive Controls: MOLT-4 nuclear extract: sc-2151 or K-562 nuclear extract: sc-2130.

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.