

DDX15 (T-20): sc-67550

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., et al. 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., et al. 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., et al. 2002. The human La (SS-B) autoantigen interacts with DDX15/hPrp43, a putative DEAH-box RNA helicase. *RNA* 8: 1428-1443.

CHROMOSOMAL LOCATION

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

SOURCE

DDX15 (T-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DDX15 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-67550 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

DDX15 (T-20) is recommended for detection of DDX15 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).

DDX15 (T-20) is also recommended for detection of DDX15 in additional species, including equine, canine, bovine and porcine.

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.

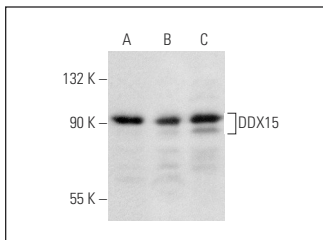
Molecular Weight of DDX15: 92 kDa.

Positive Controls: Y79 nuclear extract: sc-2126, K-562 nuclear extract: sc-2130 or PC-3 nuclear extract: sc-2152.

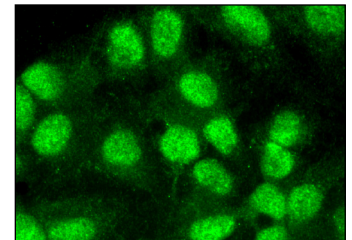
RECOMMENDED SECONDARY REAGENTS

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



DDX15 (T-20): sc-67550. Western blot analysis of DDX15 expression in Y79 (A), PC-3 (B) and K-562 (C) nuclear extracts.



DDX15 (T-20): sc-67550. Immunofluorescence staining of formalin-fixed HepG2 cells showing nuclear localization.

RESEARCH USE

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



Try **DDX15 (E-6): sc-271686**, our highly recommended monoclonal alternative to DDX15 (T-20).