

DDX31 (T-15): sc-131911

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. DDX31 (DEAD-box protein 31), also known as Helicain, is an 851 amino acid protein that contains one helicase ATP-binding domain and one helicase C-terminal domain. Localized to the nucleus, DDX31 is thought to function as an ATP-dependent RNA helicase that is involved in pre-mRNA splicing events, possibly playing a role in cell cycle progression. Four isoforms of DDX31 exist due to alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: DDX31 (human) mapping to 9q34.13; Ddx31 (mouse) mapping to 2 A3.

SOURCE

DDX31 (T-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DDX31 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-131911 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

DDX31 (T-15) is recommended for detection of DDX31 isoforms 1-4 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); non cross-reactive with other DDX family members.

DDX31 (T-15) is also recommended for detection of DDX31 isoforms 1-4 in additional species, including equine, canine and avian.

Suitable for use as control antibody for DDX31 siRNA (h): sc-92524, DDX31 siRNA (m): sc-142931, DDX31 shRNA Plasmid (h): sc-92524-SH, DDX31 shRNA Plasmid (m): sc-142931-SH, DDX31 shRNA (h) Lentiviral Particles: sc-92524-V and DDX31 shRNA (m) Lentiviral Particles: sc-142931-V.

Molecular Weight (predicted) of DDX31 isoforms: 94/85/64/35 kDa.

Molecular Weight (observed) of DDX31 isoforms: 30/58 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.