DDX8 (F-19): sc-101020

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BIOTECHNOLOGY

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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. DDX8 (DEAH box polypeptide 8), also known as DHX8, HRH1 or PRP22, contains an arginine- and serine-rich domain (RS domain) that is characteristic of some splicing factors. DDX8 may be targeted to the spliceosome through an interaction involving its RS domain.

REFERENCES

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5. Zhang, D.Y., Ampasala, D.R., Zheng, S.C., Cusson, M., Cheng, X.W., Krell, P.J. and Feng, Q.L. 2006. Molecular cloning and characterization of a putative nuclear DEAD box RNA helicase in the spruce budworm, *Choristoneura fumiferana*. Arch. Insect Biochem. Physiol. 61: 209-219.

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7. Theissen, B., Karow, A.R., Köhler, J., Gubaev, A. and Klostermeier, D. 2008. Cooperative binding of ATP and RNA induces a closed conformation in a DEAD box RNA helicase. Proc. Natl. Acad. Sci. USA 105: 548-553.

CHROMOSOMAL LOCATION

Genetic locus: DHX8 (human) mapping to 17q21.31; Dhx8 (mouse) mapping to 11 D.

SOURCE

DDX8 (F-19) is a mouse monoclonal antibody raised against recombinant DDX8 of human origin.

PRODUCT

Each vial contains 100 µg IgG$_{2a}$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

DDX8 (F-19) is recommended for detection of DDX8 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for DDX8 siRNA (h): sc-93820, DDX8 siRNA (m): sc-142948, DDX8 shRNA Plasmid (h): sc-93820-SH, DDX8 shRNA Plasmid (m): sc-142948-SH, DDX8 shRNA (h) Lentiviral Particles: sc-93820-V and DDX8 shRNA (m) Lentiviral Particles: sc-142948-V.

Molecular Weight of DDX8: 139 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or NIH/3T3 whole cell lysate: sc-2210.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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
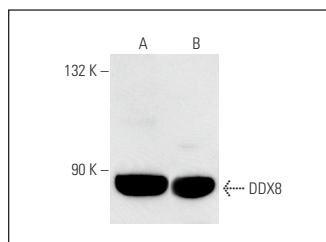
DDX8 (F-19): sc-101020. Western blot analysis of DDX8 expression in 293T (**A**) and NIH/3T3 (**B**) whole cell lysates.
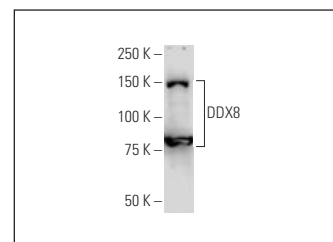
DDX8 (F-19): sc-101020. Western blot analysis of DDX8 expression in HeLa nuclear extract.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

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