SANTA CRUZ BIOTECHNOLOGY, INC.

DDX8 (F-1): sc-515533

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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

1. Ono, Y., et al. 1994. Identification of a putative RNA helicase (HRH1), a human homolog of yeast Prp22. Mol. Cell. Biol. 14: 7611-7620.
2. Py, B., et al. 1996. A DEAD-box RNA helicase in the *Escherichia coli* RNA degradosome. Nature 381: 169-172.
3. Eisen, A., et al. 1998. A novel DEAD-box RNA helicase exhibits high sequence conservation from yeast to humans. Biochim. Biophys. Acta 1397: 131-136.
4. Kittler, R., et al. 2004. An endoribonuclease-prepared siRNA screen in human cells identifies genes essential for cell division. Nature 432: 1036-1040.
5. Zhang, D.Y., et al. 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.
6. Jain, C. 2008. The *E. coli* RhlE RNA helicase regulates the function of related RNA helicases during ribosome assembly. RNA 14: 381-389.

CHROMOSOMAL LOCATION

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

SOURCE

DDX8 (F-1) is a mouse monoclonal antibody raised against amino acids 446-587 mapping within an internal region of DDX8 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

DDX8 (F-1) is available conjugated to agarose (sc-515533 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-515533 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515533 PE), fluorescein (sc-515533 FITC), Alexa Fluor® 488 (sc-515533 AF488), Alexa Fluor® 546 (sc-515533 AF546), Alexa Fluor® 594 (sc-515533 AF594) or Alexa Fluor® 647 (sc-515533 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515533 AF680) or Alexa Fluor® 790 (sc-515533 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

DDX8 (F-1) is recommended for detection of DDX8 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

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.

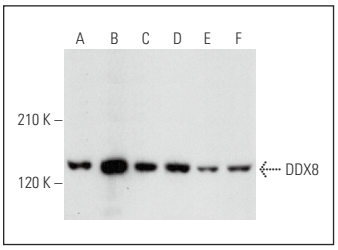
Molecular Weight of DDX8: 139 kDa.

Positive Controls: HEK293T whole cell lysate: sc-45137, Jurkat whole cell lysate: sc-2204 or Hep G2 cell lysate: sc-2227.

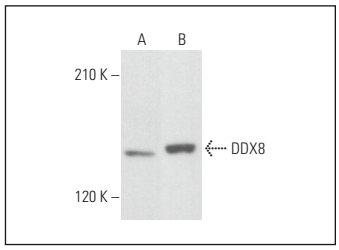
RECOMMENDED SUPPORT REAGENTS

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). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



DDX8 (F-1): sc-515533. Western blot analysis of DDX8 expression in HeLa (**A**) and Y79 (**B**) nuclear extracts and HEK293T (**C**), Jurkat (**D**), HT-1080 (**E**) and Hep G2 (**F**) whole cell lysates.



DDX8 (F-1): sc-515533. Western blot analysis of DDX8 expression in ALL-SIL (**A**) and TK-1 (**B**) whole cell lysates.

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.