

p68 RNA Helicase (A-5): sc-166167

BACKGROUND

p68 RNA Helicase is a nuclear protein that exhibits RNA-dependent ATPase activity. Phosphorylation by protein kinase C inhibits p68 RNA Helicase activity. p68 RNA Helicase appears to play a role in organ differentiation during development. Furthermore, p68 RNA Helicase is expressed in early neural development and in various mesodermal tissues in a number of different chordate embryos. At the cellular level, the expression levels of p68 RNA Helicase increases in serum-induced quiescent cell lines. p68 RNA Helicase may function as a coactivator for estrogen receptor α . Additionally, p68 RNA Helicase associates with transcriptional coactivators CBP and p300. p68 RNA Helicase localizes to the nucleus under normal conditions. During late telophase, p68 RNA Helicase and fibrillarin colocalize to nascent nucleoli. p68 RNA Helicase may function as a heterodimer with p72 RNA helicase.

CHROMOSOMAL LOCATION

Genetic locus: DDX5 (human) mapping to 17q23.3; Ddx5 (mouse) mapping to 11 E1.

SOURCE

p68 RNA Helicase (A-5) is a mouse monoclonal antibody raised against amino acids 471-614 mapping at the C-terminus of p68 RNA Helicase of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

p68 RNA Helicase (A-5) is recommended for detection of p68 RNA Helicase of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

p68 RNA Helicase (A-5) is also recommended for detection of p68 RNA Helicase in additional species, including canine and bovine.

Suitable for use as control antibody for p68 RNA Helicase siRNA (h): sc-37141, p68 RNA Helicase siRNA (m): sc-37142, p68 RNA Helicase shRNA Plasmid (h): sc-37141-SH, p68 RNA Helicase shRNA Plasmid (m): sc-37142-SH, p68 RNA Helicase shRNA (h) Lentiviral Particles: sc-37141-V and p68 RNA Helicase shRNA (m) Lentiviral Particles: sc-37142-V.

Molecular Weight of p68 RNA Helicase: 68 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, IMR-32 cell lysate: sc-2409 or Neuro-2A whole cell lysate: sc-364185.

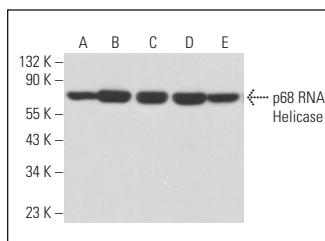
STORAGE

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

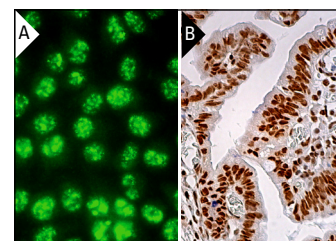
RESEARCH USE

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

DATA



p68 RNA Helicase (A-5): sc-166167. Western blot analysis of p68 RNA Helicase expression in HeLa (A), IMR-32 (B), Neuro-2A (C) and C6 (D) whole cell lysates and rat cerebellum tissue extract (E).



p68 RNA Helicase (A-5): sc-166167. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing nuclear staining of glandular cells (B).

SELECT PRODUCT CITATIONS

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- Chi, B., et al. 2018. Interactome analyses revealed that the U1 snRNP machinery overlaps extensively with the RNAP II machinery and contains multiple ALS/SMA-causative proteins. *Sci. Rep.* 8: 8755.
- Mersaoui, S.Y., et al. 2019. Arginine methylation of the DDX5 helicase RGG/RG motif by PRMT5 regulates resolution of RNA:DNA hybrids. *EMBO J.* 38: e100986.
- Zhang, L., et al. 2020. RNA helicase p68 inhibits the transcription and post-transcription of Pkd1 in ADPKD. *Theranostics* 10: 8281-8297.
- Yu, Z., et al. 2020. DDX5 resolves R-loops at DNA double-strand breaks to promote DNA repair and avoid chromosomal deletions. *NAR Cancer* 2: zcaa028.
- Asberger, J., et al. 2020. Endoxifen and fulvestrant regulate estrogen-receptor α and related DEAD-box proteins. *Endocr. Connect.* 9: 1156-1167.
- Sessa, G., et al. 2021. BRCA2 promotes DNA-RNA hybrid resolution by DDX5 helicase at DNA breaks to facilitate their repair[†]. *EMBO J.* 40: e106018.
- Kang, H.J., et al. 2021. Thrap3 promotes R-loop resolution via interaction with methylated DDX5. *Exp. Mol. Med.* E-published.

PROTOCOLS

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