SANTA CRUZ BIOTECHNOLOGY, INC.

p68 RNA Helicase (H-144): sc-32858

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 increase 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 co-localize to nascent nucleoli. p68 RNA Helicase may function as a heterodimer with p72 RNA Helicase.

REFERENCES

1. Hirling, H., Scheffner, M., Restle, T. and Stahl, H. 1989. RNA helicase activity associated with the human p68 protein. Nature 339: 562-564.
2. Buelt, M.K., Glidden, B.J. and Storm, D.R. 1994. Regulation of p68 RNA Helicase by calmodulin and protein kinase C. J. Biol. Chem. 269: 29367-29370.
3. Stevenson, R.J., Hamilton, S.J., MacCallum, D.E., Hall, P.A. and Fuller-Pace, F.V. 1998. Expression of the "DEAD box" RNA Helicase p68 is developmentally and growth regulated and correlates with organ differentiation/maturation in the fetus. J. Pathol. 184: 351-359.
4. Endoh, H., Maruyama, K., Masuhiro, Y., Kobayashi, Y., Goto, M., Tai, H., Yanagisawa, J., Metzger, D., Hashimoto, S. and Kato, S. 1999. Purification and identification of p68 RNA Helicase acting as a transcriptional coactivator specific for the activation function 1 of human estrogen receptor α. Mol. Cell. Biol. 19: 5363-5372.
5. Seufert, D.W., Kos, R., Erickson, C.A. and Swalla, B.J. 2000. p68, a DEAD box RNA helicase, is expressed in chordate embryo neural and mesodermal tissues. J. Exp. Zool. 288: 193-204.

CHROMOSOMAL LOCATION

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

SOURCE

p68 RNA Helicase (H-144) is a rabbit polyclonal antibody raised against amino acids 471-614 mapping at the C-terminus of p68 RNA Helicase 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.

STORAGE

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

APPLICATIONS

p68 RNA Helicase (H-144) is recommended for detection of p68 RNA Helicase 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), 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).

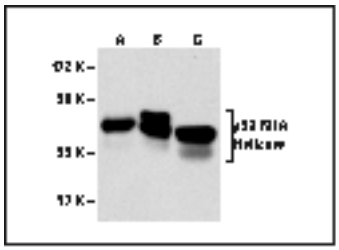
p68 RNA Helicase (H-144) is also recommended for detection of p68 RNA Helicase in additional species, including equine, canine and bovine.

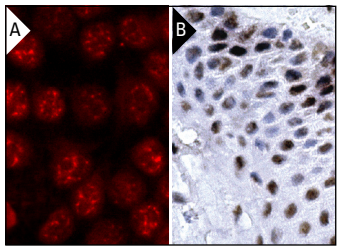
Suitable for use as control antibody for p68 RNA Helicase siRNA (h): sc-37141, p68 RNA Helicase siRNA (m): sc-37142, p68 RNA Helicase shRNA Plasmid (h): sc-37141-SH, p68 RNA Helicase shRNA Plasmid (m): sc-37142-SH, p68 RNA Helicase shRNA (h) Lentiviral Particles: sc-37141-V and p68 RNA Helicase shRNA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

Molecular Weight of p68 RNA Helicase: 68 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, p68 RNA Helicase (h2): 293T Lysate: sc-175254 or NIH/3T3 nuclear extract: sc-2138.

DATA





p68 RNA Helicase (H-144): sc-32858. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human cervix tissue showing nuclear staining of squamous epithelial cells (**B**).

SELECT PRODUCT CITATIONS

1. Fujita, T. and Fujii, H. 2011. Direct identification of insulator components by insertional chromatin immunoprecipitation. PLoS ONE 6: e26109.

RESEARCH USE

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