

# Fibrillarin (H-9): sc-514239

## BACKGROUND

Fibrillarin is a widely occurring, basic, nonhistone protein that is localized exclusively in the fibrillar region of the nucleolus, including both the dense fibrillar and the fibrillar center regions. Fibrillarin is a protein that is also expressed in HeLa cells, 3T3 cells, and human peripheral blood lymphocytes. In metaphase and anaphase, fibrillarin is found on putative chromosomal nucleolar regions (NORs). During telophase, fibrillarin is an early marker for the site of the newly forming nucleolus. The structure of fibrillarin includes an RNA-binding domain and an RNP consensus sequence, which is consistent with the association of fibrillarin with the U3 small nucleolar RNA. Fibrillarin is involved in processing rRNA transcripts in the nucleolus.

## REFERENCES

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- Jansen, R.P., et al. 1991. Evolutionary conservation of the human nucleolar protein fibrillarin and its functional expression in yeast. *J. Cell Biol.* 113: 715-729.
- Scheer, U. and Hock, R. 1999. Structure and function of the nucleolus. *Curr. Opin. Cell Biol.* 11: 385-390.
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- Newton, K., et al. 2003. Fibrillarin is essential for early development and required for accumulation of an intron-encoded small nucleolar RNA in the mouse. *Mol. Cell Biol.* 23: 8519-8527.
- Deng, L., et al. 2004. Structure determination of fibrillarin from the hyperthermophilic archaeon *Pyrococcus furiosus*. *Biochem. Biophys. Res. Commun.* 315: 726-32.

## CHROMOSOMAL LOCATION

Genetic locus: FBL (human) mapping to 19q13.2; Fbl (mouse) mapping to 7 A3.

## SOURCE

Fibrillarin (H-9) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 88-111 at the N-terminus of Fibrillarin of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-514239 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## APPLICATIONS

Fibrillarin (H-9) is recommended for detection of Fibrillarin 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 Fibrillarin siRNA (h): sc-37883, Fibrillarin siRNA (m): sc-37884, Fibrillarin shRNA Plasmid (h): sc-37883-SH, Fibrillarin shRNA Plasmid (m): sc-37884-SH, Fibrillarin shRNA (h) Lentiviral Particles: sc-37883-V and Fibrillarin shRNA (m) Lentiviral Particles: sc-37884-V.

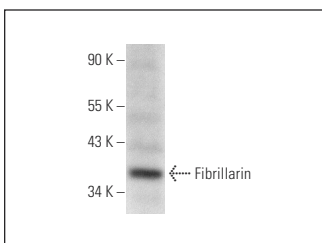
Molecular Weight of Fibrillarin: 36 kDa.

Positive Controls: 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 L-Agarose: sc-2336 (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



Fibrillarin (H-9): sc-514239. Western blot analysis of Fibrillarin expression in Hep G2 whole cell lysate.

## 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.



See **Fibrillarin (G-8): sc-374022** for Fibrillarin antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647.