

Fibrillarin (A-16): sc-11335

BACKGROUND

Fibrillarin is a widely occurring, basic, non-histone protein that is localized exclusively in the fibrillar region of the nucleolus, including both the dense fibrillar and the fibrillar center regions. Fibrillarin 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

- Ochs, R.L., et al. 1985. Fibrillarin: a new protein of the nucleolus identified by autoimmune sera. *Biol. Cell* 54: 123-133.
- 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.

CHROMOSOMAL LOCATION

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

SOURCE

Fibrillarin (A-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Fibrillarin 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.

Blocking peptide available for competition studies, sc-11335 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Fibrillarin (A-16) is recommended for detection of Fibrillarin 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).

Fibrillarin (A-16) is also recommended for detection of Fibrillarin in additional species, including canine, bovine and porcine.

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.

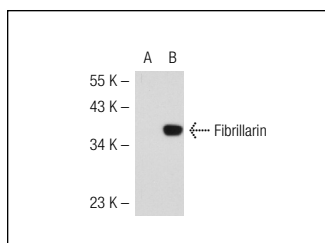
Molecular Weight of Fibrillarin: 36 kDa.

Positive Controls: rat liver extract: sc-2395, MOLT-4 nuclear extract: sc-2151 or Fibrillarin (m): 293T Lysate: sc-126852.

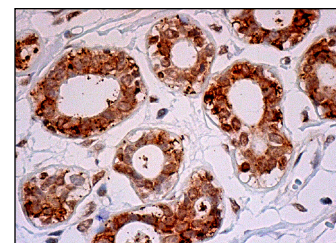
RESEARCH USE

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

DATA



Fibrillarin (A-16): sc-11335. Western blot analysis of Fibrillarin expression in non-transfected: sc-117752 (A) and mouse Fibrillarin transfected: sc-126852 (B) 293T whole cell lysates.



Fibrillarin (A-16): sc-11335. Immunoperoxidase staining of formalin fixed, paraffin-embedded human breast tissue showing nuclear and cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

- Shiio, Y., et al. 2002. Quantitative proteomic analysis of Myc oncoprotein function. *EMBO J.* 21: 5088-5096.
- Burns, K.H., et al. 2003. Roles of NPM2 in chromatin and nucleolar organization in oocytes and embryos. *Science* 300: 633-636.
- Zelazowska, M. and Jaglarz, M.K. 2004. Oogenesis in phthirapterans (Insecta: Phthiraptera). I. Morphological and histochemical characterization of the oocyte nucleus and its inclusions. *Arthropod Struct. Dev.* 33: 161-172.
- Kodiha, M., et al. 2005. Stress inhibits nucleocytoplasmic shuttling of heat shock protein HSC 70. *Am. J. Physiol., Cell Physiol.* 289: 1034-1041.
- Colombo, E., et al. 2005. Nucleophosmin is required for DNA integrity and p19Arf protein stability. *Mol. Cell. Biol.* 25: 8874-8886.
- Griffith, M.E., et al. 2007. The TORMOZ gene encodes a nucleolar protein required for regulated division planes and embryo development in arabidopsis. *Plant Cell* 19: 2246-2263.
- Moran, D.M., et al. 2009. Puromycin-based vectors promote a Ros-dependent recruitment of PML to nuclear inclusions enriched with HSP70 and Proteasomes. *BMC Cell Biol.* 10: 32.
- Kodiha, M., et al. 2011. Computer-based fluorescence quantification: a novel approach to study nucleolar biology. *BMC Cell Biol.* 12: 25.

STORAGE

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



Try **Fibrillarin (G-8): sc-374022** or **Fibrillarin (G-4): sc-166021**, our highly recommended monoclonal alternatives to Fibrillarin (A-16). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Fibrillarin (G-8): sc-374022**.