

Fibrillarin (H-140): sc-25397

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 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

1. Ochs, R.L., et al. 1985. Fibrillarin: a new protein of the nucleolus identified by autoimmune sera. *Biol. Cell* 54: 123-133.
2. Aris, J.P., et al. 1991. cDNA cloning and sequencing of human Fibrillarin, a conserved nucleolar protein recognized by autoimmune anti-sera. *Proc. Natl. Acad. Sci. USA* 88: 931-935.

CHROMOSOMAL LOCATION

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

SOURCE

Fibrillarin (H-140) is a rabbit polyclonal antibody raised against amino acids 61-200 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.

APPLICATIONS

Fibrillarin (H-140) 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Fibrillarin (H-140) is also recommended for detection of Fibrillarin in additional species, including canine.

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: K-562 nuclear extract: sc-2130, Hep G2 cell lysate: sc-2227 or MOLT-4 nuclear extract: sc-2151.

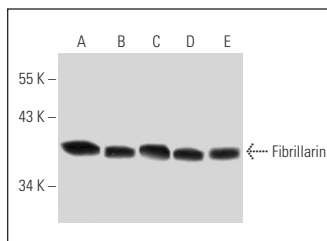
RESEARCH USE

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

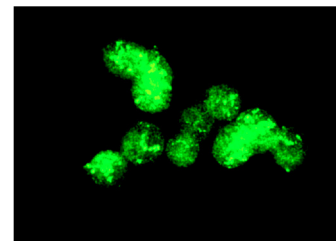
STORAGE

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

DATA



Fibrillarin (H-140): sc-25397. Western blot analysis of Fibrillarin expression in Hep G2 (A) and C4 (B) whole cell lysates, MOLT-4 (C) and K-562 (D) nuclear extracts and rat liver tissue extract (E).



Fibrillarin (H-140): sc-25397. Immunofluorescence staining of methanol-fixed K562 cells showing nuclear localization.

SELECT PRODUCT CITATIONS

1. Espert, L., et al. 2006. The exonuclease ISG20 mainly localizes in the nucleolus and the Cajal (Coiled) bodies and is associated with nuclear SMN protein-containing complexes. *J. Cell. Biochem.* 98: 1320-1333.
2. Deng, W.J., et al. 2010. Proteome, phosphoproteome, and hydroxyproteome of liver mitochondria in diabetic rats at early pathogenic stages. *Mol. Cell. Proteomics* 9: 100-116.
3. Padmanabhan, R.A., et al. 2011. CrkL is a co-activator of estrogen receptor alpha that enhances tumorigenic potential in cancer. *Mol. Endocrinol.* 25: 1499-1512.
4. Kodiha, M., et al. 2011. Computer-based fluorescence quantification: a novel approach to study nucleolar biology. *BMC Cell Biol.* 12: 25.
5. Kar, B., et al. 2011. Quantitative nucleolar proteomics reveals nuclear reorganization during stress-induced senescence in mouse fibroblast. *BMC Cell Biol.* 12: 33.
6. Zhang, Y., et al. 2011. Identification of DHX33 as a mediator of rRNA synthesis and cell growth. *Mol. Cell. Biol.* 31: 4676-4691.
7. Alameda, J.P., et al. 2011. Increased IKK α expression in the basal layer of the epidermis of transgenic mice enhances the malignant potential of skin tumors. *PLoS ONE* 6: e21984.
8. Pérez-Castro, A.J. and Freire, R. 2012. Rad9B responds to nucleolar stress through ATR and JNK signalling, and delays the G₁-S transition. *J. Cell Sci.* 125: 1152-1164.



Try **Fibrillarin (G-8): sc-374022** or **Fibrillarin (G-4): sc-166021**, our highly recommended monoclonal alternatives to Fibrillarin (H-140). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Fibrillarin (G-8): sc-374022**.