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Fibrillarin / FBL Antibody (internal region)
Peptide-affinity purified goat antibody
Catalog # AF3810a

Specification

Fibrillarin / FBL Antibody (internal region) - Product Information

Application	**WB**
Primary Accession	P22087
Other Accession	NP_001427.2, 2091, 14113 (mouse), 292747 (rat)
Reactivity	**Human**
Predicted	**Mouse, Rat, Pig, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5 mg/ml**
Isotype	**IgG**
Calculated MW	**33784**

Fibrillarin / FBL Antibody (internal region) - Additional Information

Gene ID 2091

Other Names
rRNA 2'-O-methyltransferase fibrillarin, 2.1.1.-, 34 kDa nucleolar scleroderma antigen, Histone-glutamine methyltransferase, FBL, FIB1, FLRN

Format
0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Fibrillarin / FBL Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

Fibrillarin / FBL Antibody (internal region) - Protein Information

Name FBL (HGNC:3599)

Synonyms FIB1, FLRN

Function
S-adenosyl-L-methionine-dependent methyltransferase that has the ability to methylate both RNAs and proteins (PubMed:24352239, PubMed:<a href="http://www.uniprot.org/citations/30540930"

target="_blank">30540930, PubMed:32017898). Involved in pre-rRNA processing by catalyzing the site-specific 2'-hydroxyl methylation of ribose moieties in pre-ribosomal RNA (PubMed:30540930). Site specificity is provided by a guide RNA that base pairs with the substrate (By similarity). Methylation occurs at a characteristic distance from the sequence involved in base pairing with the guide RNA (By similarity). Probably catalyzes 2'-O-methylation of U6 snRNAs in box C/D RNP complexes (PubMed:32017898). U6 snRNA 2'-O-methylation is required for mRNA splicing fidelity (PubMed:32017898). Also acts as a protein methyltransferase by mediating methylation of 'Gln-105' of histone H2A (H2AQ104me), a modification that impairs binding of the FACT complex and is specifically present at 35S ribosomal DNA locus (PubMed:24352239, PubMed:30540930). Part of the small subunit (SSU) processome, first precursor of the small eukaryotic ribosomal subunit. During the assembly of the SSU processome in the nucleolus, many ribosome biogenesis factors, an RNA chaperone and ribosomal proteins associate with the nascent pre-rRNA and work in concert to generate RNA folding, modifications, rearrangements and cleavage as well as targeted degradation of pre-ribosomal RNA by the RNA exosome (PubMed:34516797).

Cellular Location
Nucleus, nucleolus. Nucleus, nucleoplasm {ECO:0000250|UniProtKB:P35550}. Note=Fibrillar region of the nucleolus

Fibrillarin / FBL Antibody (internal region) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Fibrillarin / FBL Antibody (internal region) - Images

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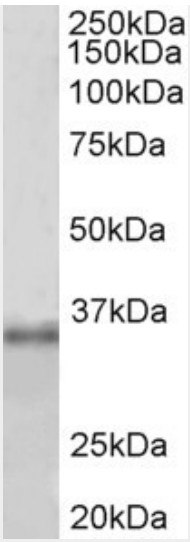

AF3810a (1 µg/ml) staining of HEK293 lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Fibrillarin / FBL Antibody (internal region) - References

Association of guanine nucleotide-exchange protein BIG1 in HepG2 cell nuclei with nucleolin, U3 snoRNA, and fibrillarin. Padilla PI, Uhart M, Pacheco-Rodriguez G, Peculis BA, Moss J, Vaughan M. Proc Natl Acad Sci U S A. 2008 Mar 4;105(9):3357-61. Epub 2008 Feb 21. PMID: 18292223