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Fibrillarin Antibody
Rabbit mAb
Catalog # AP90515

Specification

Fibrillarin Antibody - Product Information

Application	**WB, IHC, FC, ICC, IP**
Primary Accession	P22087
Reactivity	**Rat**
Clonality	**Monoclonal**
Other Names	
FBL;FIB;FLRN;RNU3IP1;	
Isotype	**Rabbit IgG**
Host	**Rabbit**
Calculated MW	**33784 Da**

Fibrillarin Antibody - Additional Information

Dilution	**WB~~1:1000** **IHC~~1:100~500** **FC~~1:10~50** **ICC~~N/A** **IP~~N/A**
Purification	**Affinity-chromatography**
Immunogen	**A synthesized peptide derived from human Fibrillarin**
Description	**Fibrillarin is a 2'-O-methyltransferase located in fibrillar regions and Cajal bodies of the nucleolus, where RNA transcription and pre-RNA processing take place. Fibrillarin associates with several other structual proteins as well as box C/D snoRNA to form a complex that functions in pre-rRNA processing, pre-rRNA methylation and ribosome assembly. This complex catalyzes site-specific 2'-O-ribose methylation of targeted nucleotides within the rRNA sequence. The sequence, structure and function of fibrillarin are highly conserved and fibrillarin gene expression is essential for early embryonic development.**
Storage Condition and Buffer	**Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.**

Fibrillarin Antibody - 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: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 Antibody - 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 Antibody - Images

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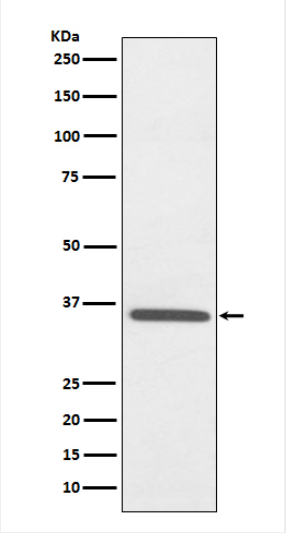

Western blot analysis of Fibrillarin expression in HepG2 cell lysate.