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Anti-Fibrillarin FBL Rabbit Monoclonal Antibody

Catalog # ABO14079

Product Information

Application	WB, IHC, IF, ICC, IP, FC
Primary Accession	P22087
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-Fibrillarin FBL Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

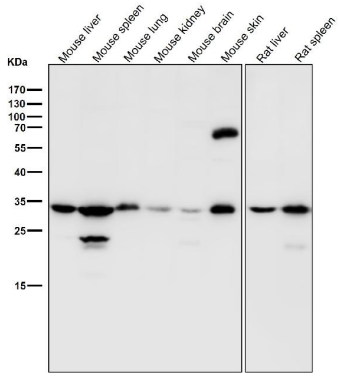
Additional Information

Gene ID	2091
Other Names	rRNA 2'-O-methyltransferase fibrillarin, 2.1.1.-, 34 kDa nucleolar scleroderma antigen, Histone-glutamine methyltransferase, U6 snRNA 2'-O-methyltransferase fibrillarin, FBL (HGNC:3599), FIB1, FLRN
Calculated MW	33784
Application Details	WB 1:500-1:2000 IHC 1:50-1:100 ICC/IF 1:50-1:100 IP : 1:30 FC 1:50
Subcellular Localization	Nucleus, nucleolus. Fibrillar region of the nucleolus.
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: DIO-6
Immunogen	A synthesized peptide derived from human Fibrillarin
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

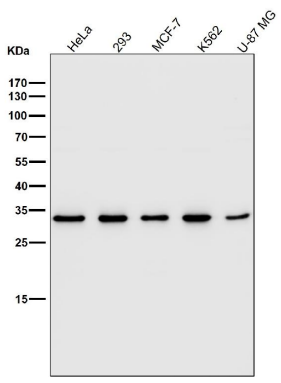
Protein Information

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

Images

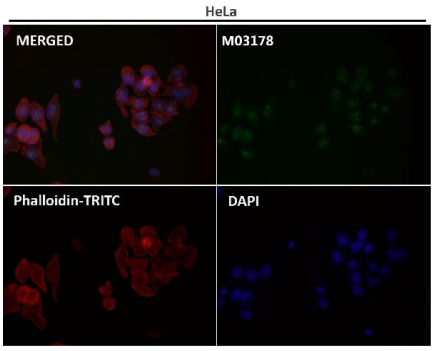


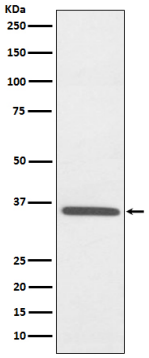
All lanes use the Antibody at 1:2K dilution for 1 hour at room temperature.



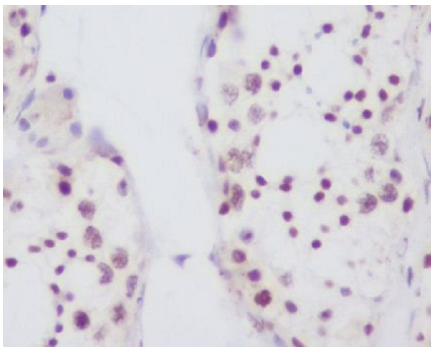
All lanes use the Antibody at 1:2K dilution for 1 hour at room temperature.

Immunofluorescent analysis using the Antibody at 1:50 dilution.

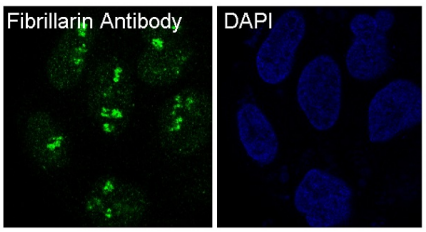




Western blot analysis of Fibrillarin expression in HepG2 cell lysate.



Immunohistochemical analysis of paraffin-embedded human testis, using Fibrillarin Antibody.



Immunofluorescent analysis of Hela cells, using Fibrillarin Antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.