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FBL Antibody (Center E120)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP2776c

Specification

FBL Antibody (Center E120) - Product Information

Application	**WB,E**
Primary Accession	P22087
Other Accession	P22509, P35550
Reactivity	**Human**
Predicted	**Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**33784**
Antigen Region	**105-135**

FBL Antibody (Center E120) - Additional Information

Gene ID 2091

Other Names
rRNA 2'-O-methyltransferase fibrillarin, 211-, 34 kDa nucleolar scleroderma antigen, Histone-glutamine methyltransferase, FBL, FIB1, FLRN

Target/Specificity
This FBL antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 105-135 amino acids from the Central region of human FBL.

Dilution
WB~~1:1000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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

Precautions
FBL Antibody (Center E120) is for research use only and not for use in diagnostic or therapeutic procedures.

FBL Antibody (Center E120) - 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).

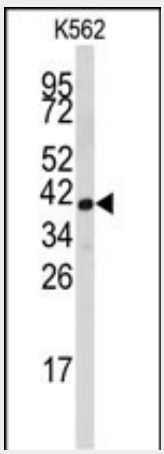
Cellular Location
Nucleus, nucleolus. Nucleus, nucleoplasm {ECO:0000250|UniProtKB:P35550}. Note=Fibrillar region of the nucleolus

FBL Antibody (Center E120) - 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

FBL Antibody (Center E120) - Images



Western blot analysis of anti-FBL Antibody (Center E120) (Cat.#AP2776c) in K562 cell line lysates (35ug/lane). FBL (arrow) was detected using the purified Pab.

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FBL Antibody (Center E120) - Background

FBL is a component of a nucleolar small nuclear ribonucleoprotein (snRNP) particle thought to participate in the first step in processing preribosomal RNA. It is associated with the U3, U8, and U13 small nuclear RNAs and is located in the dense fibrillar component (DFC) of the nucleolus. This protein contains an N-terminal repetitive domain that is rich in glycine and arginine residues, like fibrillarins in other species. Its central region resembles an RNA-binding domain and contains an RNP consensus sequence. Antisera from approximately 8% of humans with the autoimmune disease scleroderma recognize fibrillarin.

FBL Antibody (Center E120) - References

Amin,M.A., Biochem. Biophys. Res. Commun. 360 (2), 320-326 (2007)
Dunphy,J.L., Traffic 8 (6), 661-672 (2007)