abcam

ab166630

# Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [EPR10823(B)] - Nucleolar Marker

Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [EPR10823(B)] - Nucleolar Marker (ab166630) is a rabbit monoclonal antibody detecting Fibrillarin and Fibrillarin-like protein 1 in **Western Blot, Flow Cytometry (Intra), ICC/IF**. Suitable for **Human, Mouse, Rat**.

- Biophysical QC for unrivalled batch-batch consistency
- Over 20 publications

Lab Essentials | Recombinant | RabMAb

## Key facts

| | |
|---|---|
| **Isotype** | IgG |
| **Host species** | Rabbit |
| **Storage buffer** | pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 50% Tissue culture supernatant, 40% Glycerol (glycerin, glycerine), 0.05% BSA |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Immunogen** | The exact immunogen used to generate this antibody is proprietary information. |
| **Clone number** | EPR10823(B) |
| **Purity** | Tissue culture supernatant |

## Reactivity data

### IHC-P

**Not recommended**

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | - |

| | |
|---|---|
| **Notes** | Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. |

| | |
|---|---|
| **Species** | Mouse |
| **Dilution info** | - |
| **Notes** | - |

| | |
|---|---|
| **Species** | Rat |
| **Dilution info** | - |
| **Notes** | - |

## WB

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1/1000 - 1/5000 |
| **Notes** | - |

| | |
|---|---|
| **Species** | Mouse |
| **Dilution info** | 1/1000 - 1/5000 |
| **Notes** | - |

| | |
|---|---|
| **Species** | Rat |
| **Dilution info** | 1/1000 - 1/5000 |
| **Notes** | - |

## ICC/IF

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1/5000 |
| **Notes** | **For unpurified use at 1/100 - 1/250** |

| | |
|---|---|
| **Species** | Mouse |
| **Dilution info** | 1/5000 |

| | |
|---|---|
| **Notes** | **For unpurified use at 1/100 - 1/250** |

### Expected

| | |
|---|---|
| **Species** | Rat |
| **Dilution info** | Use at an assay dependent concentration. |
| **Notes** | - |

## Flow Cyt (Intra)

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1/10 - 1/100 |
| **Notes** | ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody. |

### Expected

| | |
|---|---|
| **Species** | Mouse, Rat |
| **Dilution info** | Use at an assay dependent concentration. |
| **Notes** | - |

## Target data

See full target information FBL

| | |
|---|---|
| **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).

## Storage

| | |
|---|---|
| **Shipped at conditions** | Conditional Ambient |
| **Appropriate short-term storage duration** | 1-2 weeks |
| **Appropriate short-term storage conditions** | +4°C |
| **Appropriate long-term storage conditions** | -20°C |
| **Aliquoting information** | Upon delivery aliquot |
| **Storage information** | Avoid freeze / thaw cycle |

## Notes

**What is this antibody validated in?**
Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [EPR10823(B)] - Nucleolar Marker (ab166630) is a rabbit recombinant monoclonal antibody and is validated for use in Western Blot (WB), Flow Cytometry (Intra), Immunocytochemistry/immunofluorescence (ICC/IF) in Human, Mouse, Rat samples.

**What is the molecular weight of Fibrillarin?**
Anti-Fibrillarin+Fibrillarin-like protein 1 [EPR10823(B)] - Nucleolar Marker (ab166630) specifically detects a band for Fibrillarin and Fibrillarin-like protein 1 (UniProt: P22087) at a molecular weight of 33kDa.

**Trusted by the scientific community**
Anti-Fibrillarin+Fibrillarin-like protein 1 [EPR10823(B)] - Nucleolar Marker (ab166630) was first used in a scientific publication in 2013 and has been cited over 20 times in peer-reviewed journals.

**Other related products**
We have a range of other formats of antibody clone [EPR10823(B)] also available for your convenience: ab166630, Alexa Fluor® 488 - ab184817, HRP - ab196980, Alexa Fluor® 568 - ab202540, Alexa Fluor® 594 - ab203400, Alexa Fluor® 555 - ab203410, Carrier free - ab240147

**Patented technology**
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

**What are the advantages of a recombinant monoclonal antibody?**
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

## Product promise

**Tested**

We have tested this species and application combination and it works. It is covered by our product promise.

**Expected**

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

**Predicted**

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

**Not recommended**

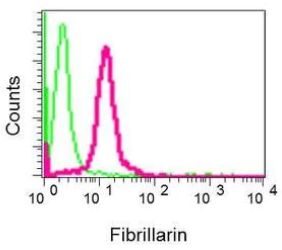
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

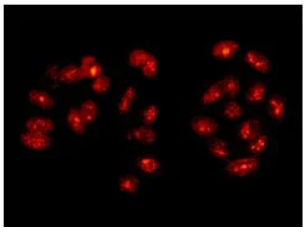
## 8 product images




### Flow Cytometry (Intracellular) - Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [EPR10823(B)] - Nucleolar Marker (ab166630)

Fibrillarin+Fibrillarin-like protein 1 Flow Cytometry (Intracellular) staining using rabbit Anti-Fibrillarin+Fibrillarin-like protein 1 antibody

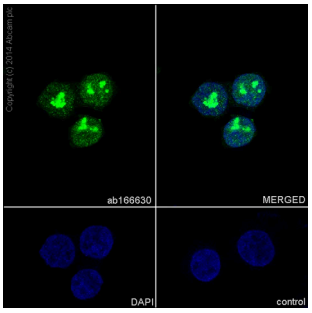
Intracellular flow cytometric analysis of permeabilized MOLT4 cells using ab166630 at a 1/10 dilution (red) or a Rabbit IgG (negative) (green).



## Immunocytochemistry/ Immunofluorescence - Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [EPR10823(B)] - Nucleolar Marker (ab166630)

Fibrillarin+Fibrillarin-like protein 1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Fibrillarin+Fibrillarin-like protein 1 antibody

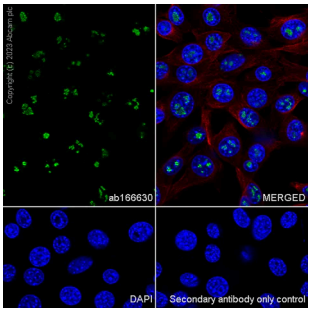
Immunofluorescent analysis of HeLa cells labeling Fibrillarin with ab166630 at a 1/100 dilution.




## Immunocytochemistry/ Immunofluorescence - Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [EPR10823(B)] - Nucleolar Marker (ab166630)

Fibrillarin+Fibrillarin-like protein 1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Fibrillarin+Fibrillarin-like protein 1 antibody

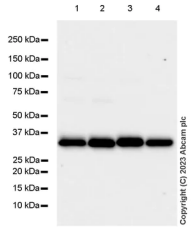
Immunocytochemistry/Immunofluorescence analysis of HT-29 (human colorectal adenocarcinoma) cells labelling Fibrillarin (green) with purified ab166630 at 1/5000. Cells were fixed with 4% Paraformaldehyde and permeabilized with 0.1% Triton X-100. ab150077, Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. DAPI (blue) was used as a nuclear counterstain.
Secondary Only Control: PBS was used instead of the primary antibody as the negative control.




## Immunocytochemistry/ Immunofluorescence - Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [EPR10823(B)] - Nucleolar Marker (ab166630)

Fibrillarin+Fibrillarin-like protein 1 Immunocytochemistry/ Immunofluorescence staining of NIH/3T3 (mouse embryonic fibroblast) cells using rabbit Anti-Fibrillarin+Fibrillarin-like protein 1 antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized NIH/3T3 (mouse embryonic fibroblast) cells labelling Fibrillarin with ab166630 at 1/200 (0.5 µg/ml) dilution followed by secondary antibody ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbedused at 1/1000 dilution (2µg/ml) (Green). ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (2.5 µg/ml) (Red). The Nuclear counterstain was DAPI (Blue). Confocal image showing nuclear staining in NIH/3T3 cell line. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).




## Western blot - Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [EPR10823(B)] - Nucleolar Marker (ab166630)

Fibrillarin+Fibrillarin-like protein 1 Western blot staining using rabbit Anti-Fibrillarin+Fibrillarin-like protein 1 antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST. The lysates were freshly made and used for Western Blotting immediately to minimize protein degradation.
All lanes:
Western blot - Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [EPR10823(B)] - Nucleolar Marker (ab166630) at 1/1000 dilution

Lane 1:
HeLa (human cervical adenocarcinoma epithelial cell) whole cell lysate at 20 µg

Lane 2:
293T (human embryonic kidney epithelial cell) whole cell lysate at 20 µg

Lane 3:
NIH/3T3 (mouse embryonic fibroblast) whole cell lysate at 20 µg

Lane 4:
PC-12 (rat adrenal gland pheochromocytoma cell) whole cell lysate at 20 µg

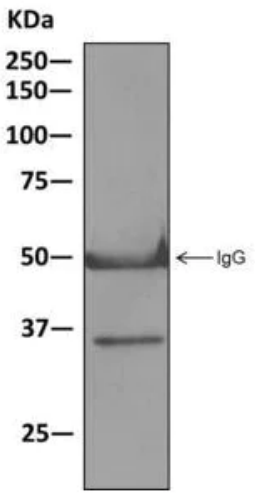
Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 33 kDa

Observed band size: 33 kDa

Exposure time: 10s



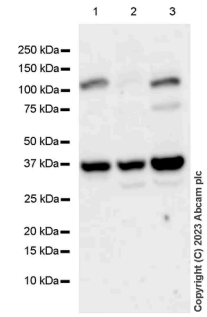

## Western blot - Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [EPR10823(B)] - Nucleolar Marker (ab166630)

Fibrillarin+Fibrillarin-like protein 1 Western blot staining of immunoprecipitation pellet from HepG2 cell lysate using rabbit Anti-Fibrillarin+Fibrillarin-like protein 1 antibody

All lanes:
Western blot - Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [EPR10823(B)] - Nucleolar Marker (ab166630) at 1/1000 dilution

All lanes:
immunoprecipitation pellet from HepG2 cell lysate at 10 µg

Predicted band size: 33 kDa




## Western blot - Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [EPR10823(B)] - Nucleolar Marker (ab166630)

Fibrillarin+Fibrillarin-like protein 1 Western blot staining using rabbit Anti-Fibrillarin+Fibrillarin-like protein 1 antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST. The lysates were freshly made and used for Western Blotting immediately to minimize protein degradation.
All lanes:
Western blot - Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [EPR10823(B)] - Nucleolar Marker (ab166630) at 1/1000 dilution

Lane 1:
Mouse liver tissue lysate at 20 µg

Lane 2:
Mouse testis tissue lysate at 20 µg

Lane 3:
Mouse spleen tissue lysate at 20 µg

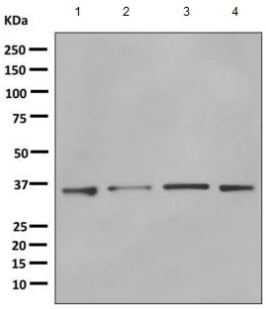
Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 33 kDa

Observed band size: 33 kDa

Exposure time: 81s




## Western blot - Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [EPR10823(B)] - Nucleolar Marker (ab166630)

Fibrillarin+Fibrillarin-like protein 1 Western blot staining using rabbit Anti-Fibrillarin+Fibrillarin-like protein 1 antibody

All lanes:
Western blot - Anti-Fibrillarin+Fibrillarin-like protein 1 antibody [EPR10823(B)] - Nucleolar Marker (ab166630) at 1/1000 dilution

Lane 1:
293T cell lysate at 10 µg

Lane 2:
HeLa cell lysate at 10 µg

Lane 3:
HepG2 cell lysate at 10 µg

Lane 4:
MOLT4 cell lysate at 10 µg

Predicted band size: 33 kDa

Observed band size: 33 kDa

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