abcam

Product datasheet

Anti-Fibrillarin antibody [38F3] - Nucleolar Marker ab4566

★★★★★ 24 Abreviews 198 References 9 图像

概述

产品名称	Anti-Fibrillarin抗体[38F3] - Nucleolar Marker
描述	小鼠单克隆抗体[38F3] to Fibrillarin - Nucleolar Marker
宿主	Mouse
特异性	This clone was selected because it stains a single ~34kDa band on western blotting and shows a clear and strong punctate staining of yeast nuclei. It can therefore be used to identify nucleoli immunocytochemically. ab4566 was raised against yeast nuclear preps and the immunogen was identified as Nop1p, the yeast homolog of fibrillarin. Due to high aa homology the antibody should work with any specie possessing a nucleus, however this has not been tested.
经测试应用	**适用于:** Flow Cyt, ICC/IF, WB
种属反应性	**与反应:** Mouse, Rat, Human **预测可用于:** Plants
免疫原	Tissue, cells or virus corresponding to Saccharomyces cerevisiae Fibrillarin. Yeast nuclear preparation (S. cerevisiae). Hybridomas were screened by immunofluorescence on yeast cells and by western blotting on yeast protein homogenates (S. cerevisiae).
阳性对照	ICC: HEK-293 cells and SH-SY5Y cells; WB: HEK-293, C6, NIH-3T3 nuclear fractions
常规说明	Pfam number: PF01269. A reference below describes the characterization of D77, an antibody very similar but not identical to ab4566. Gives a much weaker signal in western blot compared to **ab218846**. The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

存储溶液	Preservative: 0.065% Sodium azide Constituent: Tissue culture supernatant
纯度	Tissue culture supernatant
纯化说明	Sterile filtered.
克隆	单克隆
克隆编号	38F3
同种型	IgG1

应用

The Abpromise guarantee Abpromise™承诺保证使用ab4566于以下的经测试应用

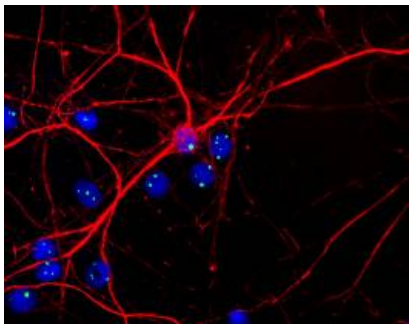
"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt		1/20. **ab170190** - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
ICC/IF	★★★★★ (9)	1/100. For IF of mammalian cells 1/500. ab4566 is sensitive to aldehyde. Use a mild formalin fixation or acetone or methanol fixation as the target is nuclear.
WB	★★★★★ (10)	1/2000 - 1/10000. Detects a band of approximately 34 kDa. 1/2000 (cell lysates) - 1/10000 (nuclear fractions)(ECL). For other (non-ECL) western detection methods, 1/1000 - 1/5000. To detect mammalian fibrillarin on western blots by ECL, 1/500.

靶标

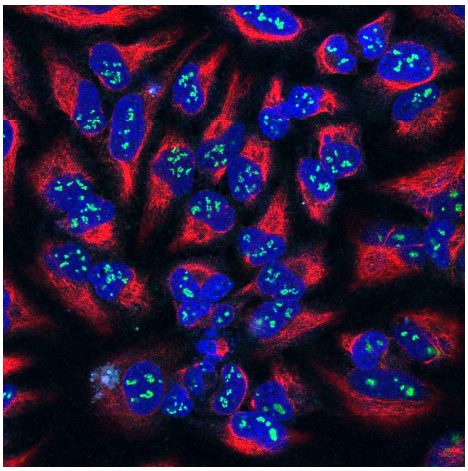
功能	S-adenosyl-L-methionine-dependent methyltransferase that has the ability to methylate both RNAs and proteins. Involved in pre-rRNA processing by catalyzing the site-specific 2'-hydroxyl methylation of ribose moieties in pre-ribosomal RNA. Site specificity is provided by a guide RNA that base pairs with the substrate. Methylation occurs at a characteristic distance from the sequence involved in base pairing with the guide RNA. 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).
序列相似性	Belongs to the methyltransferase superfamily. Fibrillarin family.
翻译后修饰	By homology to other fibrillarins, some or all of the N-terminal domain arginines are modified to asymmetric dimethylarginine (DMA).
细胞定位	Nucleus, nucleolus. Fibrillar region of the nucleolus.

图片



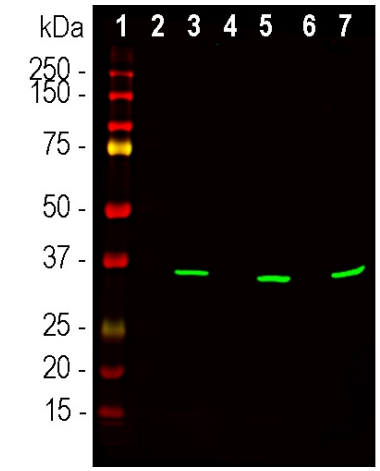
Immunocytochemistry/ Immunofluorescence - Anti-Fibrillarin antibody [38F3] - Nucleolar Marker (ab4566)

Rat neurons and glial stained with mouse monoclonal to Fibrillarin (green) and with chicken antibody to neurofilament NF-H (red). Cells were counterstained with a fluorescent DNA probe (blue). Nuclear DNA is revealed with Hoechst dye (blue). Cultures were processed using our standard fixation and staining procedure (in protocol section).



Immunocytochemistry/ Immunofluorescence - Anti-Fibrillarin antibody [38F3] - Nucleolar Marker (ab4566)

ICC analysis of HeLa cells stained with mouse monoclonal to Fibrillarin (green) and with chicken antibody to vimentin (red) and counterstained with a fluorescent DNA probe (blue). Nuclear DNA is revealed with DAPI(blue). The vimentin antibody was used at a dilution of 1/1000 and the fibrillarin monoclonal at 1/100. Cultures were processed using standard fixation and staining procedure (in protocol section).

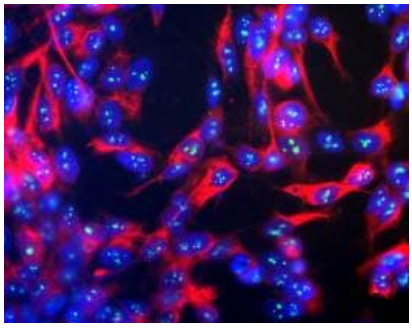


Western blot - Anti-Fibrillarin antibody [38F3] - Nucleolar Marker (ab4566)

All lanes : Anti-Fibrillarin antibody [38F3] - Nucleolar Marker (ab4566) at 1/500 dilution

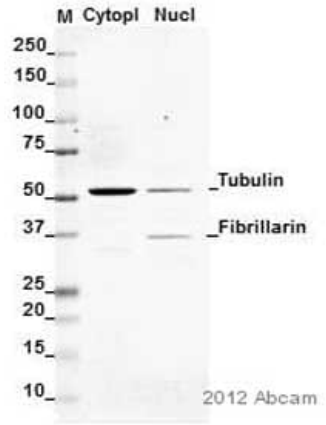
Lane 2 : C6 cytosol fraction
Lane 3 : C6 nuclear fraction
Lane 4 : HEK-293 cytosol fraction
Lane 5 : HEK-293 nuclear fraction
Lane 6 : NIH-3T3 cytosol fraction
Lane 7 : NIH-3T3 nuclear fraction

Observed band size: 37 kDa



Immunocytochemistry/ Immunofluorescence - Anti-Fibrillarin antibody [38F3] - Nucleolar Marker (ab4566)

Human neuroblastoma line SH-SY5Y stained with mouse monoclonal to Fibrillarin (green) and with chicken antibody to neurofilament NF-H (red) and counterstained with a fluorescent DNA probe (blue). Nuclear DNA is revealed with Hoechst dye (blue). The NF-H antibody was used at a dilution of 1/100000 and the fibrillarin monoclonal at 1/1000. Cultures were processed using standard fixation and staining procedure (in protocol section).

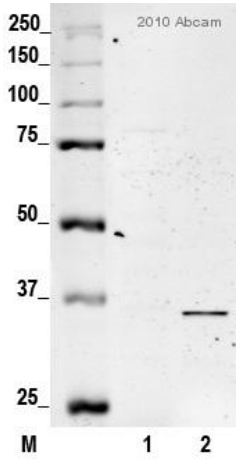


Western blot - Anti-Fibrillarin antibody [38F3] - Nucleolar Marker (ab4566)

Image courtesy of an anonymous Abreview.

Mouse embryonic fibroblast fractionation.
Cytopl - cytoplasmic fraction.
Nucl - nuclear fraction.
20 µg of each loaded.

ab4566 used at a 1/2000 dilution.
The secondary used was an Alexa-Fluor 680 conjugated goat anti-mouse polyclonal used at a 1/10000 dilution.



Western blot - Anti-Fibrillarin antibody [38F3] - Nucleolar Marker (ab4566)

Image is courtesy of Dr Svetlana Khoronenkova

All lanes : Anti-Fibrillarin antibody [38F3] - Nucleolar Marker (ab4566) at 1/2000 dilution (incubated for 1 hour, diluted with Blocking buffer 1:1 in PBS+0.1%Tween)

Lane 1 : cytoplasmic protein fraction of HeLa cells with LI-COR® Odyssey® Blocking Buffer, 45 minutes at room temperature at 50 %
Lane 2 : nuclear protein fraction of HeLa cells with LI-COR® Odyssey® Blocking Buffer, 45 minutes at room temperature at 50 %

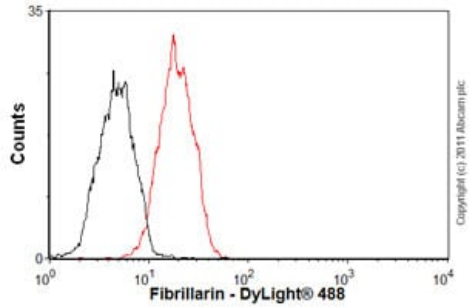
Lysates/proteins at 20 µg per lane.

Secondary
All lanes : AlexaFluor 680 goat anti-mouse at 1/10000 dilution

Performed under reducing conditions.

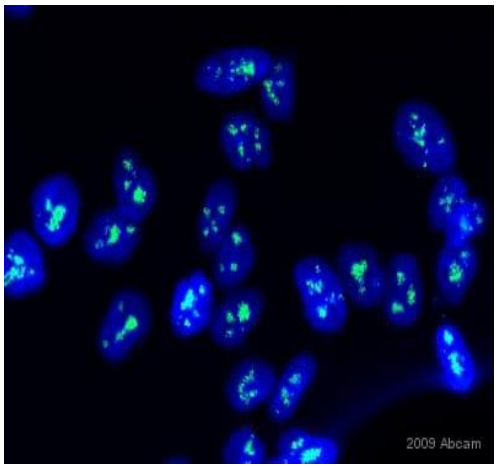
Additional bands at: 34 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 1 second



Flow Cytometry - Anti-Fibrillarin antibody [38F3] - Nucleolar Marker (ab4566)

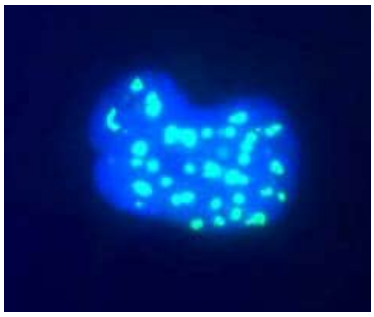
Overlay histogram showing HEK293 cells stained with ab4566 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab4566, 1/20 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (**ab96879**) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1](**ab91353**, 2µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed.



Immunocytochemistry/ Immunofluorescence - Anti-Fibrillarin antibody [38F3] - Nucleolar Marker (ab4566)

Image is courtesy of Cesar Camacho

ab staining Fibrillarin in Human melanoma A7 cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde, permeabilized with 0.1% Triton and blocked with 1% BSA for 1 hour at room temperature. Samples were incubated with primary antibody (1/500 in 1% BSA) for 24 hours at 4°C. A FITC-conjugated Goat anti-mouse polyclonal (1/200) was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-Fibrillarin antibody [38F3] - Nucleolar Marker (ab4566)

High magnification view of human Hek293 cell nuclei stained with mouse monoclonal to fibrillarin (green), counterstained with a fluorescent DNA probe (blue). Nuclear DNA is revealed with Hoechst dye (blue). Cultures were processed using our standard fixation and staining procedure (in protocol section).

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.cn/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors