abcam

Product datasheet

Anti-NOP2 antibody [EPR24888-92] - BSA and Azide free ab282822



10 Images

Overview

Product name Anti-NOP2 antibody [EPR24888-92] - BSA and Azide free

Description Rabbit monoclonal [EPR24888-92] to NOP2 - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: Flow Cyt (Intra), WB, IHC-P, IP, ICC/IF

Species reactivity Reacts with: Mouse, Rat, Human

Immunogen Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: HeLa, 293T, NIH/3T3 and PC-12 whole cell lysate. IHC-P: Human cerebrum, Human lung

adenocarcinoma, Mouse cerebrum and Rat cerebrum tissue. ICC/IF: HCT 116 and Neuro-2a

cells. Flow Cyt(Intra): HCT 116 cells. IP: 293T cells.

General notes ab282822 is the carrier-free version of ab271075.

This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or

conjugation for your experiments, please contact orders@abcam.com.

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for

increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes,

oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP,

biotin and gold.

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the

need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

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 production

For more information see here.

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

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C.

Storage buffer pH: 7.2

Constituent: 100% PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal
Clone number EPR24888-92

Isotype IgG

Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab282822 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 89 kDa.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IP		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.

Target

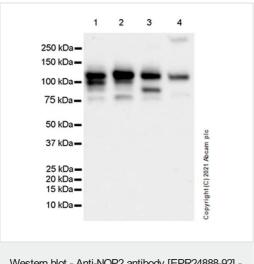
Relevance NOP2 belongs to the methyltransferase superfamily of the RsmB/NOP family. NOP2 may play a

role in the regulation of the cell cycle and the increased nucleolar activity that is associated with

the cell proliferation. May act as ribosomal RNA methyltransferase.

Cellular localization Nuclear; nucleolus

Images



Western blot - Anti-NOP2 antibody [EPR24888-92] - BSA and Azide free (ab282822)

All lanes : Anti-NOP2 antibody [EPR24888-92] (<u>ab271075</u>) at 1/1000 dilution

Lane 1 : HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate

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

Lane 3: NIH/3T3 (mouse embryonic fibroblast) whole cell lysateLane 4: PC-12 (rat adrenal gland pheochromocytoma) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/50000 dilution

Predicted band size: 89 kDa **Observed band size:** 110,90 kDa

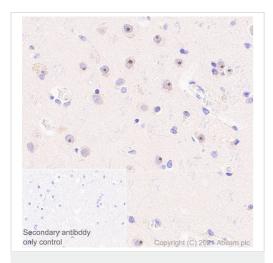
This data was developed using <u>ab271075</u>, the same antibody clone in a different buffer formulation.

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Lysates were made freshly and used in WB test immediately to minimize protein degradation.

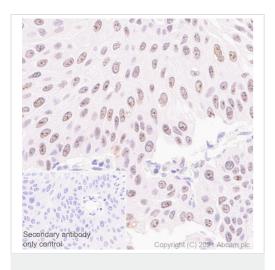
The expression profile/ molecular weight observed is consistent with what has been described in the literature (PMID:25043274).

The multiple reactive bands would represent different NOP2 isoforms.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-NOP2 antibody

[EPR24888-92] - BSA and Azide free (ab282822)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-NOP2 antibody

[EPR24888-92] - BSA and Azide free (ab282822)

This data was developed using <u>ab271075</u>, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded human cerebrum tissue labelling NOP2 with <u>ab271075</u> at 1/200 dilution (2.835 µg/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection) was used. Nucleolar staining on human cerebrum (PMID: 25481415). The section was incubated with <u>ab271075</u> for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection) was used.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

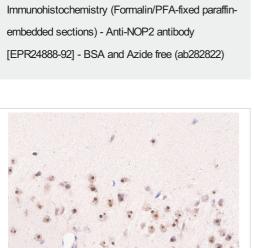
This data was developed using <u>ab271075</u>, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded human lung adenocarcinoma tissue labelling NOP2 with <u>ab271075</u> at 1/200 dilution (2.835 µg/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection) was used. Nuclear staining on human lung adenocarcinoma (PMID: 3422591). The section was incubated with <u>ab271075</u> for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection) was used.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins





Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-NOP2 antibody [EPR24888-92] - BSA and Azide free (ab282822)

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only control

This data was developed using <u>ab271075</u>, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded mouse cerebrum tissue labelling NOP2 with <u>ab271075</u> at 1/500 dilution (1.134 µg/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection) was used. Nucleolar staining on mouse cerebrum. The section was incubated with <u>ab271075</u> for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection) was used.

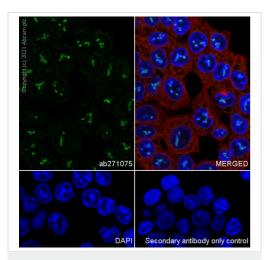
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

This data was developed using <u>ab271075</u>, the same antibody clone in a different buffer formulation.

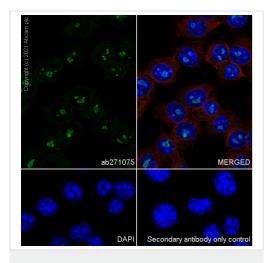
Immunohistochemical analysis of paraffin-embedded rat cerebrum tissue labelling NOP2 with <u>ab271075</u> at 1/500 dilution (1.134 µg/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection) was used. Nucleolar staining on rat cerebrum. The section was incubated with <u>ab271075</u> for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection) was used.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



Immunocytochemistry/ Immunofluorescence - Anti-NOP2 antibody [EPR24888-92] - BSA and Azide free (ab282822)



Immunocytochemistry/ Immunofluorescence - Anti-NOP2 antibody [EPR24888-92] - BSA and Azide free (ab282822)

This data was developed using <u>ab271075</u>, the same antibody clone in a different buffer formulation.

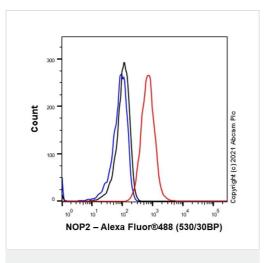
Immunofluorescent analysis of 100% methanol-fixed, 0.1% TritonX-100 permeabilized HCT 116 (human colorectal carcinoma cell line) cells labelling NOP2 with <u>ab271075</u> at 1/500 dilution (1.134 μ g/ml), followed by <u>ab150081</u> Goat Anti-Rabbit lgG H&L (Alexa Fluor[®] 488) preadsorbed antibody at 1/1000 dilution (2 μ g/ml / Green). Confocal image showing nucleolar staining in HCT 116 cell line is observed. <u>ab195889</u> Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor[®] 594) was used to counterstain tubulin at 1/200 dilution (2.5 μ g/ml / Red). Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is <u>ab150081</u> Goat Anti-Rabbit lgG H&L (Alexa Fluor[®] 488) preadsorbed at 1/1000 (2 μ g/ml) dilution.

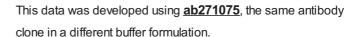
This data was developed using <u>ab271075</u>, the same antibody clone in a different buffer formulation.

Immunofluorescent analysis of 100% methanol-fixed, 0.1% TritonX-100 permeabilized Neuro-2a (Mouse neuroblastoma cell line) cells labelling NOP2 with <u>ab271075</u> at 1/500 dilution (1.134 μ g/ml), followed by <u>ab150081</u> Goat Anti-Rabbit lgG H&L (Alexa Fluor[®] 488) preadsorbed antibody at 1/1000 dilution (2 μ g/ml / Green). Confocal image showing nucleolar staining in Neuro-2a cell line is observed. <u>ab195889</u> Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor[®] 594) was used to counterstain tubulin at 1/200 dilution (2.5 μ g/ml / Red). Nuclear counterstain was DAPI (Blue).

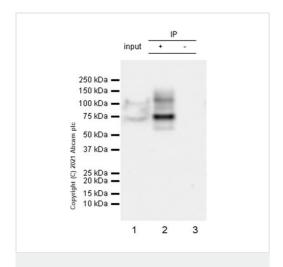
Secondary antibody only control: Secondary antibody is **ab150081**Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) preadsorbed at 1/1000 dilution (2 µg/ml).



Flow Cytometry (Intracellular) - Anti-NOP2 antibody [EPR24888-92] - BSA and Azide free (ab282822)



Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized HCT 116 (human colorectal carcinoma epithelial cell) cells labelling NOP2 with <u>ab271075</u> at 1/50 dilution (1µg / Red) compared with a Rabbit monoclonal lgG (<u>ab172730</u> / Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody / Blue). A Goat anti rabbit lgG (Alexa Fluor[®] 488, <u>ab150077</u>) at 1/2000 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-NOP2 antibody

[EPR24888-92] - BSA and Azide free (ab282822)

This data was developed using <u>ab271075</u>, the same antibody clone in a different buffer formulation.

NOP2 was immunoprecipitated from 0.35 mg 293T (human embryonic kidney epithelial cell) whole cell lysate with <u>ab271075</u> at 1/30 dilution (2µg in 0.35mg lysates). Western blot was performed on the immunoprecipitate using <u>ab271075</u> at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP)(<u>ab131366</u>) was used at 1/5000 dilution.

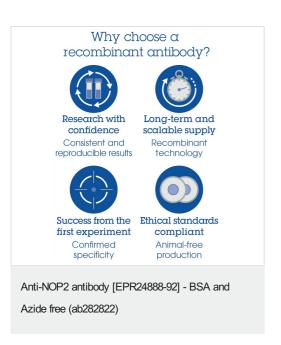
Lane 1: 293T (human embryonic kidney epithelial cell) whole cell lysate 10 µg

Lane 2: ab271075 IP in 293T whole cell lysate

Lane 3: Rabbit monoclonal IgG (<u>ab172730</u>) instead of <u>ab271075</u> in 293T whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 24 seconds



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