abcam

ab273099

Anti-BRN3A antibody [EPR23257-285] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR23257-285
Purification technique	Affinity purification Protein A
Concentration	1.009 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Mouse
Dilution info	-

Notes	-

Expected

Species	Human, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Recombinant fragment
Dilution info	-
Notes	-

WB

Expected

Species	Recombinant fragment, Mouse, Rat, Human
Dilution info	Use at an assay dependent concentration.
Notes	-

IHC-Fr

Tested

Species	Mouse
Dilution info	-
Notes	Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Rat
Dilution info	-
Notes	Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).

Species	Recombinant fragment
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Expected

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

Not recommended

Species	Recombinant fragment
Dilution info	-
Notes	-

IHC-P

Tested

Species	Rat, Mouse
Dilution info	-

Notes	-

Not recommended

Species	Human, Recombinant fragment
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Human, Mouse, Rat, Recombinant fragment
Dilution info	-
Notes	-

Target data

See full target information POU4F1

Function

Multifunctional transcription factor with different regions mediating its different effects. Acts by binding (via its C-terminal domain) to sequences related to the consensus octamer motif 5'-ATGCAAAT-3' in the regulatory regions of its target genes. Regulates the expression of specific genes involved in differentiation and survival within a subset of neuronal lineages. It has been shown that activation of some of these genes requires its N-terminal domain, maybe through a neuronal-specific cofactor. Activates BCL2 expression and protects neuronal cells from apoptosis (via the N-terminal domain). Induces neuronal process outgrowth and the coordinate expression of genes encoding synaptic proteins. Exerts its major developmental effects in somatosensory neurons and in brainstem nuclei involved in motor control. Stimulates the binding affinity of the nuclear estrogene receptor ESR1 to DNA estrogen response element (ERE), and hence modulates ESR1-induced transcriptional activity. May positively regulate POU4F2 and POU4F3. Regulates dorsal root ganglion sensory neuron specification and axonal projection into the spinal cord. Plays a role in TNFSF11-mediated terminal osteoclast differentiation. Negatively regulates its own expression interacting directly with a highly conserved autoregulatory domain surrounding the transcription initiation site. Isoform 2. Able to act as transcription factor, cannot regulate the expression of the same subset of genes than isoform 1. Does not have antiapoptotic effect on neuronal cells.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab273099 is the carrier-free version of ab245230.

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.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based 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.

Compatibility

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.

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.

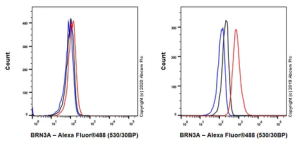
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

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6 product images

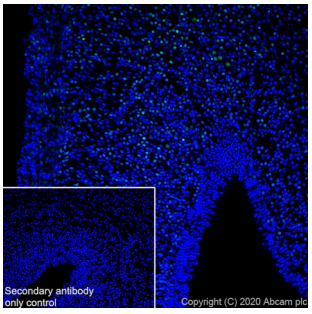


Flow Cytometry (Intracellular) - Anti-BRN3A antibody [EPR23257-285] - BSA and Azide free (ab273099)

BRN3A Flow Cytometry (Intracellular) staining using rabbit Anti-BRN3A antibody

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed, 90% methanol-permeabilized Daudi (Human Burkitt's lymphoma lymphoblast (Left) / MOLT-4 (Human lymphoblastic leukemia T lymphoblast (Right) cells labelling BRN3A with ab245230 at 1/400 dilution (Red) compared with a Rabbit monoclonal IgG (ab172730) isotype control (Black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor®488, ab150077) at 1/2000 dilution was used as the secondary antibody.
Negative control: Daudi (PMID: 20460523).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab245230).



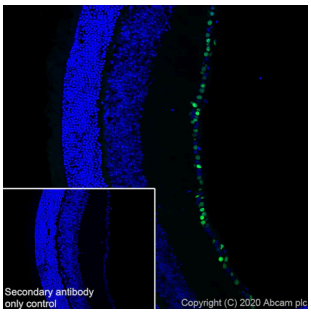
Immunohistochemistry (Frozen sections) - Anti-BRN3A antibody [EPR23257-285] - BSA and Azide free (ab273099)

BRN3A Immunohistochemistry (Frozen sections) staining using rabbit Anti-BRN3A antibody

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen mouse E14.5 embryo tissue labeling BRN3A with ab245230 at 1/100 dilution followed by ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution (Green). Nuclear staining on mouse E14.5 embryonic brain is observed. The nuclear counterstain was DAPI (Blue).
Secondary antibody control: Secondary antibody is ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.

Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab245230).



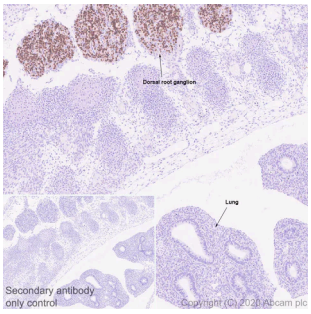
Immunohistochemistry (Frozen sections) - Anti-BRN3A antibody [EPR23257-285] - BSA and Azide free (ab273099)

BRN3A Immunohistochemistry (Frozen sections) staining using rabbit Anti-BRN3A antibody

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen mouse retina tissue labeling BRN3A with ab245230 at 1/100 dilution followed by ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution (Green). Nuclear staining on ganglion cell layer of mouse retina is observed. The nuclear counterstain was DAPI (Blue).
Secondary antibody control: Secondary antibody is ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.

Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab245230).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-BRN3A antibody [EPR23257-285] - BSA and Azide free (ab273099)

BRN3A Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-BRN3A antibody

Immunohistochemical analysis of paraffin-embedded rat E14.5 tissue labeling BRN3A with ab245230 at 1/2000 dilution followed by ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Nuclear staining on dorsal root ganglia of rat E14.5 (PMID: 8341591). The section was incubated with ab245230 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 ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab245230).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-BRN3A antibody [EPR23257-285] - BSA and Azide free (ab273099)

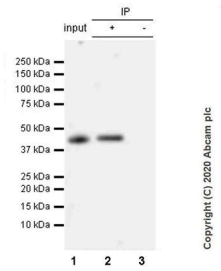
BRN3A Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-BRN3A antibody

Immunohistochemical analysis of paraffin-embedded mouse E14.5 tissue labeling BRN3A with ab245230 at 1/2000 dilution followed by ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Nuclear staining on cochleovestibular ganglion and colliculus of mouse E14.5 (PMID: 24709358). The section was incubated with ab245230 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 ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab245230).



Immunoprecipitation - Anti-BRN3A antibody [EPR23257-285] - BSA and Azide free (ab273099)

BRN3A was immunoprecipitated from 0.35 mg mouse E14.5 brain tissue lysate with ab245230 at 1/30 dilution (2µg in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab245230 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP)(ab131366) was used at 1/5000 dilution.
Lane 1: Mouse E14.5 brain tissue lysate 10µg.

Lane 2: ab245230 IP in mouse E14.5 brain tissue lysate.

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab245230 in mouse E14.5 brain tissue lysate.

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

Exposure time: 3 minutes.

This blot was developed using a higher sensitivity ECL substrate.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab245230).

All lanes:
Immunoprecipitation - Anti-BRN3A antibody [EPR23257-285] (ab245230)

Predicted band size: 43 kDa

Observed band size: 42 kDa

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