abcam

# ab81213

# Anti-BRN3A antibody [EP1972Y]

Recombinant | RabMAb | 20ul selling size

## Key facts

| | |
|---|---|
| **Isotype** | IgG |
| **Host species** | Rabbit |
| **Storage buffer** | pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 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** | EP1972Y |
| **Purification technique** | Affinity purification Protein A |
| **Concentration** | 1.037 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |

## Reactivity data

### IP

**Not recommended**

| | |
|---|---|
| **Species** | Mouse, Rat, Human |
| **Dilution info** | - |
| **Notes** | - |

### WB

### Tested

| | |
|---|---|
| **Species** | Mouse |
| **Dilution info** | 1/2000 |
| **Notes** | **For unpurified use at 1/500 - 1/1000.** |

| | |
|---|---|
| **Species** | Rat |
| **Dilution info** | 1/2000 |
| **Notes** | **For unpurified use at 1/500 - 1/1000.** |

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1/2000 |
| **Notes** | **For unpurified use at 1/500 - 1/1000.** |

## ICC/IF

### Not recommended

| | |
|---|---|
| **Species** | Human, Mouse, Rat |
| **Dilution info** | - |
| **Notes** | - |

## Flow Cyt (Intra)

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1/100 |
| **Notes** | ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody. For unpurified use at 1/90. |

### Expected

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

**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**

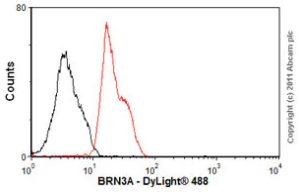
We do not recommend this combination. It is not covered by our product promise.

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.

## 5 product images

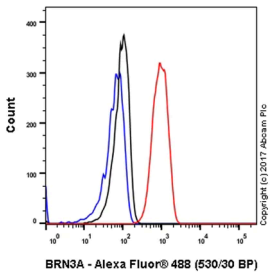



### Flow Cytometry (Intracellular) - Anti-BRN3A antibody [EP1972Y] (ab81213)

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

Overlay histogram showing SH-SY5Y cells stained withunpurified ab81213 (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 (ab81213, 1/50 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit IgG (H+L) (ab96899) at 1/500

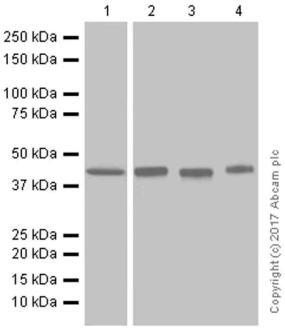
dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monclonal) (1µg/1x$10^6$ cells) used under the same conditions. Acquisition of >5,000 events was performed.




## Flow Cytometry (Intracellular) - Anti-BRN3A antibody [EP1972Y] (ab81213)

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

Intracellular Flow Cytometry analysis of SH-SY5Y (Human neuroblastoma epithelial cell) cells labeling BRN3A with purified ab81213 at 1/100 dilution (red). Cells were fixed with 4% Paraformaldehyde. A Goat anti rabbit IgG (Alexa Fluor® 488) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).




## Western blot - Anti-BRN3A antibody [EP1972Y] (ab81213)

Blocking and diluting buffer: 5% NFDM/TBST.
All lanes:
Western blot - Anti-BRN3A antibody [EP1972Y] (ab81213) at 1/2000 dilution

Lane 1:
SW480 (Human colorectal adenocarcinoma epithelial cell) whole cell lysates at 20 µg

Lane 2:
Mouse cerebellum lysates at 20 µg

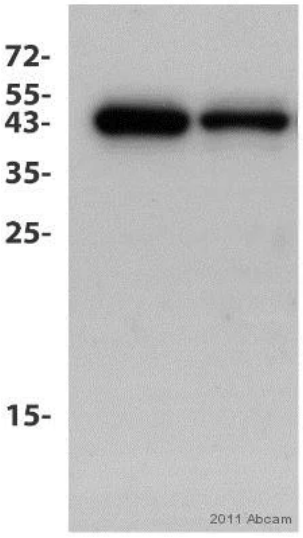
Lane 3:
Rat brain lysates at 20 µg

Lane 4:
Rat spinal cord lysates at 20 µg

Secondary

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

Predicted band size: 43 kDa




## Western blot - Anti-BRN3A antibody [EP1972Y] (ab81213)

All lanes:
Western blot - Anti-BRN3A antibody [EP1972Y] (ab81213) at 1/2000 dilution

Lane 1:
Adult mouse cerebellum lysate at 20 µg

Lane 2:
Adult mouse lower brainstem lysate at 20 µg

Secondary

All lanes:
HRP-conjugated Mouse anti-Rabbit IgG monoclonal. at 1/10000 dilution

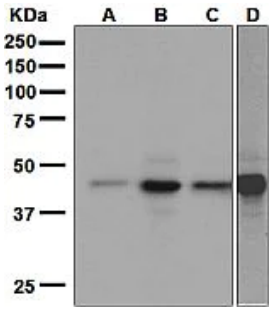
Performed under reducing conditions.

This image is courtesy of an Anonymous customer review.

Predicted band size: 43 kDa

Observed band size: 43 kDa

Exposure time: 2min




## Western blot - Anti-BRN3A antibody [EP1972Y] (ab81213)

All lanes:
Western blot - Anti-BRN3A antibody [EP1972Y] (ab81213)

Lane 1:
LNCaP

Lane 2:
SW480

Lane 3:
PC-3

Lane 4:
Human brain lysate

Predicted band size: 43 kDa

Observed band size: 43 kDa

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