abcam

ab233708

Anti-NR3B antibody [2A8E11]

Mouse Monoclonal NR3B antibody. Suitable for Flow Cyt, WB and reacts with Human samples. Cited in 2 publications. Immunogen corresponding to Recombinant Fragment Protein within Human GRIN3B aa 100-300.

Image updates are in progress. Products remain available and covered by the Abcam Product Promise. Learn more.

Key facts

Isotype	IgG2a
Host species	Mouse
Storage buffer	Preservative: 0.05% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Human GRIN3B aa 100-300. The exact immunogen used to generate this antibody is proprietary information. Database link O60391
Clone number	2A8E11
Purification technique	Affinity purification Protein G
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from tissue culture supernatant.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1/200 - 1/400
Notes	-

WB

Tested

Species	Human
Dilution info	1/500 - 1/2000
Notes	-

Target data

See full target information GRIN3B

Function

Component of a non-conventional N-methyl-D-aspartate (NMDA) receptors (NMDARs) that function as heterotetrameric, ligand-gated cation channels with low calcium permeability and low voltage-dependent block by Mg(2+) (By similarity). Forms glutamatergic receptor complexes with GluN1 and GluN2 subunits which are activated by glycine binding to the GluN1 and GluN3 subunits and L-glutamate binding to GluN2 subunits (By similarity). Forms excitatory glycinergic receptor complexes with GluN1 alone which are activated by glycine binding to the GluN1 and GluN3 subunits. GluN3B subunit also binds D-serine and, in the absence of glycine, activates glycinergic receptor complexes, but with lower efficacy than glycine (By similarity). Each GluN3 subunit confers differential attributes to channel properties, including activation, deactivation and desensitization kinetics, pH sensitivity, Ca2(+) permeability, and binding to allosteric modulators (By similarity).

Storage

Shipped at conditions	Blue Ice
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

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	NR3B also known as Nerve Growth Factor-inducible Protein B is a nuclear receptor protein that belongs to the NR3 subfamily. It has an approximate mass of 64 kDa. This protein is predominantly expressed in tissues such as the brain and kidney. Mechanically NR3B functions as a ligand-activated transcription factor regulating the expression of specific genes. Its structure includes a DNA-binding domain and a ligand-binding domain enabling it to bind to specific DNA sequences and control gene transcription in response to hormonal and other chemical signals.
Biological function summary	As part of the nuclear receptor family NR3B plays a significant role in regulating gene expression in response to hormonal changes. It forms a complex with other proteins to modulate transcriptional activity. NR3B participates in the regulation of genes involved in cellular growth differentiation and apoptosis. Its activity can influence various downstream biological processes positioning NR3B as an integral component of cellular homeostasis.
Pathways	NR3B integrates into key pathways controlling metabolic and signaling processes. It is notably involved in the nuclear receptor signaling pathway which plays a central role in regulating genes linked to metabolism and cellular stress. In these pathways it interacts with related nuclear receptors such as NR4A1 and NR4A3 which share similar gene regulatory functions. Through these interactions NR3B contributes to maintaining the delicate balance of cellular responses to internal and external stimuli.
Associated diseases and disorders	NR3B has associations with certain types of cancer and neurological disorders. It plays a role in tumor growth and progression due to its involvement in cell proliferation and survival pathways. In neurological contexts its expression levels can be linked to neurodegenerative diseases where its regulatory functions may be disrupted. NR3B interacts with proteins like BCL2 and AKT which are key players in both cancer progression and neuronal survival mechanisms highlighting the diverse role of NR3B in disease conditions.

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.

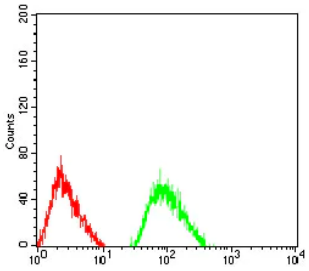
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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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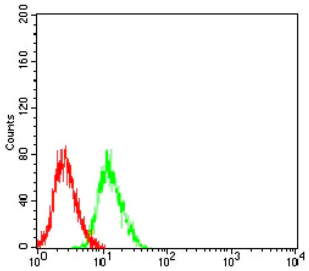
2 product images



Flow Cytometry - Anti-NR3B antibody [2A8E11] (ab233708)

NR3B Flow Cytometry staining using mouse Anti-NR3B antibody

Flow cytometric analysis of SK-N-SH (human neuroblastoma cell line) cells labeling NR3B with ab233708 at 1/200 dilution (green) compared with a negative control (red).



Flow Cytometry - Anti-NR3B antibody [2A8E11] (ab233708)

NR3B Flow Cytometry staining using mouse Anti-NR3B antibody

Flow cytometric analysis of SH-SY5Y (human neuroblastoma cell line from bone marrow) cells labeling NR3B with ab233708 at 1/200 dilution (green) compared with a negative control (red).

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