

Datasheet: AHP669

Description:	RABBIT ANTI GAP43
Specificity:	GAP43
Format:	Serum
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	0.1 ml

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen	▪			
Immunohistology - Paraffin	▪			
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting	▪			1/500 - 1/1000
Immunofluorescence	▪			

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

Target Species

Cat

Species Cross Reactivity

Reacts with: Human, Rat, Monkey, Mouse

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Serum - liquid

Antiserum Preparation

Antisera to GAP43 were raised by repeated immunisations of rabbits with highly purified antigen.

Preservative Stabilisers

<0.1% Sodium Azide (NaN₃)

Immunogen Purified GAP43 from cat brain.

External Database

Links

UniProt:

[Q6S9D9](#) [Related reagents](#)

Entrez Gene:

[493873](#) GAP43 [Related reagents](#)

RRID

AB_2247457

Specificity

Rabbit anti GAP43 antibody recognises the protein designated GAP43, a neuronal protein that is expressed at elevated levels during development and also during regenerative axon growth.

GAP43 (also known as neuromodulin, pp46, B-50, Protein F1 and calmodulin-binding protein P-57) is a protein of approximately 25 kDa that migrates on SDS-PAGE gels with an apparent size of 40-50 kDa. The aberrant migration is due to the unusually low abundance of hydrophobic amino acid residues. GAP43 is found tightly associated with neuronal membranes due to palmitoylation. The solubilised protein binds calmodulin, although this is reduced following protein kinase C phosphorylation of GAP43.

References

1. McIntosh, H. *et al.* (1989) A GAP-43-like protein in cat visual cortex. [Vis Neurosci. 2 \(6\): 583-91.](#)
2. Wang, H. *et al.* (2009) Neuroprotective effect of recombinant human erythropoietin on optic nerve injury in rats. [Chin Med J 122: 2008-12.](#)
3. Zhang, H. *et al.* (2010) Alteration of parasympathetic/sympathetic ratio in the infarcted myocardium after Schwann cell transplantation modified electrophysiological function of heart: a novel antiarrhythmic therapy. [Circulation. 122 \(11 Suppl\): S193-200.](#)
4. Parikh, P. *et al.* (2011) Regeneration of axons in injured spinal cord by activation of bone morphogenetic protein/Smad1 signaling pathway in adult neurons. [Proc Natl Acad Sci U S A. 108: E99-107.](#)
5. Turner, J.H. *et al.* (2010) Reversible loss of neuronal marker protein expression in a transgenic mouse model for sinusitis-associated olfactory dysfunction. [Am J Rhinol Allergy. 24: 192-6.](#)
6. Su, Y. *et al.* (2008) Axonal regeneration after optic nerve crush in Nogo-A/B/C knockout mice. [Mol Vis. 14: 268-73.](#)
7. Pao, P.C. *et al.* (2011) A novel RING finger protein, Znf179, modulates cell cycle exit and neuronal differentiation of P19 embryonal carcinoma cells. [Cell Death Differ. 18 \(11\): 1791-804.](#)
8. Cheng, H.T. *et al.* (2013) Increased Axonal Regeneration and Swellings in Intraepidermal Nerve Fibers Characterize Painful Phenotypes of Diabetic Neuropathy. [J Pain. pii: S1526-5900\(13\)00910-3.](#)
9. Wu, X. *et al.* (2012) Desipramine pretreatment improves sympathetic remodeling and ventricular fibrillation threshold after myocardial ischemia. [J Biomed Biotechnol. 2012: 732909.](#)
10. Oberbauer, E. *et al.* (2013) Chroman-like cyclic prenylflavonoids promote neuronal differentiation and neurite outgrowth and are neuroprotective. [J Nutr Biochem. 24 \(11\):](#)

[1953-62.](#)

11. Su, Y. *et al.* (2017) Transfection with AAV-NgR1siRNA on axonal regeneration of optic nerve after injury [Int J Clin Exp Pathol. 10 \(2\) :2327-32.](#)

Storage This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10081 available at: 10081: <https://www.bio-rad-antibodies.com/uploads/MSDS/10081.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Sheep Anti Rabbit IgG (STAR34...) [FITC](#)

Sheep Anti Rabbit IgG (STAR35...) [RPE](#)

Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)

Sheep Anti Rabbit IgG (STAR36...) [DyLight®488](#), [DyLight®680](#), [DyLight®800](#)

Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)

Recommended Useful Reagents

[TidyBlot WESTERN BLOT DETECTION REAGENT:HRP \(STAR209P\)](#)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

'M389247:210806'

Printed on 21 Mar 2022

© 2022 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)