

## Datasheet: AHP669

**BATCH NUMBER 157544**

<b>Description:</b>	RABBIT ANTI GAP43
<b>Specificity:</b>	GAP43
<b>Format:</b>	Serum
<b>Product Type:</b>	Polyclonal Antibody
<b>Isotype:</b>	Polyclonal IgG
<b>Quantity:</b>	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](http://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

0.09% Sodium Azide (NaN<sub>3</sub>)

## Stabilisers

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**Immunogen** Purified GAP43 from cat brain.

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## External Database Links

### UniProt:

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

### Entrez Gene:

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

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**RRID** AB\_2247457

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## 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.

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## References

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2. Wang, H. *et al.* (2009) Neuroprotective effect of recombinant human erythropoietin on optic nerve injury in rats. [Chin Med J 122: 2008-12.](#)
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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.](#)

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**Storage** Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10081 available at: <https://www.bio-rad-antibodies.com/SDS/AHP669>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

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

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

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

### Recommended Useful Reagents

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

**North & South** Tel: +1 800 265 7376

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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)  
'M364277:200529'

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