

Datasheet: AHP1799

**BATCH NUMBER 167294**

<b>Description:</b>	RABBIT ANTI HUMAN NOGOA (N-TERMINAL)
<b>Specificity:</b>	NOGOA (N-TERMINAL)
<b>Format:</b>	Purified
<b>Product Type:</b>	Polyclonal Antibody
<b>Isotype:</b>	Polyclonal IgG
<b>Quantity:</b>	0.1 mg

## 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
Immunohistology - Paraffin (1)	▪			2.5ug/ml
Western Blotting	▪			0.5 - 1.0ug/ml

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

**(1) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.**

### Target Species

Human

### Species Cross Reactivity

Reacts with: Mouse, Rat

**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

Purified IgG - liquid

### Antiserum Preparation

Antisera to human NogoA were raised by repeated immunisation of rabbits with highly purified antigen. Purified IgG prepared from whole serum by affinity chromatography.

### Buffer Solution

Phosphate buffered saline

<b>Preservative Stabilisers</b>	0.02% Sodium Azide (NaN <sub>3</sub> )
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0mg/ml
<b>Immunogen</b>	Synthetic peptide sequence corresponding to a 23 amino acid sequence from near the carboxy terminus of Human NogoA
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q9NQC3</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">57142</a>    RTN4    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	KIAA0886, NOGO
<b>RRID</b>	AB_10612769
<b>Specificity</b>	<p><b>Rabbit anti Human NOGOA antibody</b> recognizes human Reticulon-4 (RTN4), also known as NogoA, neurite outgrowth inhibitor, Foccen, Neuroendocrine-specific protein, Neuroendocrine-specific protein C homolog, Reticulon-5 or RTN-x. NogoA is a 1192 amino acid multi pass transmembrane protein associated with the endoplasmic reticulum, a member of a family of integral membrane proteins termed reticulons. Six isoforms of NogoA can be generated by alternative splicing, the canonical isoform 1 is predominantly expressed in the brain and testis with weaker expression in the heart and skeletal muscle.</p> <p>Reticulons are involved in various neurodegenerative diseases such as Amyotrophic lateral sclerosis, and multiple sclerosis (<a href="#">Chiurchiù et al. 2014</a>). Reticulon proteins have been demonstrated to regulate many cellular processes and interact with multiple proteins and receptors such as <a href="#">BACE</a>. NogoA was initially identified as a myelin-associated neurite outgrowth inhibitor (<a href="#">Niederöst et al. 2002</a>). NogoA is highly expressed in oligodendrocytes in the white matter of the CNS (<a href="#">Kuhlmann et al. 2008</a>). Blocking NogoA activity with antibodies or other factors results in improved long distance axonal regeneration and functional recovery in experimental CNS lesion models (<a href="#">Schwab 2004</a>).</p> <p>NOGOA has a predicted molecular weight of 130 kDa however, despite its predicted molecular weight, NogoA typically migrates at ~180 kDa in an SDS-PAGE. Rabbit anti human NOGOA antibody is expected to recognize all isoforms of NogoA.</p>
<b>Histology Positive Control Tissue</b>	Mouse brain
<b>Western Blotting</b>	AHP1799 detects a band of approximately 180 kDa in Mouse Brain tissue lysate.
<b>References</b>	<ol style="list-style-type: none"> <li>Dann, A. <i>et al.</i> (2011) Cytosolic RIG-I-like helicases act as negative regulators of sterile inflammation in the CNS. <a href="#">Nat Neurosci. 15: 98-106.</a></li> <li>Gerondopoulos, A. <i>et al.</i> (2014) Rab18 and a Rab18 GEF complex are required for</li> </ol>

normal ER structure. [J Cell Biol. 205 \(5\): 707-20.](#)

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**Further Reading**

1. Chen, M.S. *et al.* (2000) Nogo-A is a myelin-associated neurite outgrowth inhibitor and an antigen for monoclonal antibody IN-1. [Nature. 403 \(6768\): 434-9.](#)
2. Dupuis, L. *et al.* (2002) Nogo provides a molecular marker for diagnosis of amyotrophic lateral sclerosis. [Neurobiol Dis. 10 \(3\): 358-65.](#)
3. Yan, R. *et al.* (2006) Reticulon proteins: emerging players in neurodegenerative diseases. [Cell Mol Life Sci. 63 \(7-8\): 877-89.](#)
4. Schweigreiter, R. & Bandtlow, C.E. (2006) Nogo in the injured spinal cord. [J Neurotrauma. 23 \(3-4\): 384-96.](#)

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**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.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information**

Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/AHP1799>  
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**Regulatory**

For research purposes only

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## Related Products

### Recommended Useful Reagents

[ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025A\)](#)

[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](mailto:antibody_sales_us@bio-rad.com)

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Tel: +44 (0)1865 852 700

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Email: [antibody\\_sales\\_uk@bio-rad.com](mailto: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](mailto: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)

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