Datasheet: AHP1799

Description:	RABBIT ANTI HUMAN NOGOA (N-TERMINAL)
Specificity:	NOGOA (N-TERMINAL)
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	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.

	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

Preservative

0.02% Sodium Azide (NaN_3)

Stabilisers	
Approx. Protein Concentrations	IgG concentration 1.0mg/ml
Immunogen	Synthetic peptide sequence corresponding to a 23 amino acid sequence from near the carboxy terminus of Human NogoA
External Database Links	**UniProt:** Q9NQC3 Related reagents **Entrez Gene:** 57142 RTN4 Related reagents
Synonyms	KIAA0886, NOGO
RRID	AB_10612769
Specificity	**Rabbit anti Human NOGOA antibody** recognizes human Reticulon-4 (RTN4), also known as NogoA, neurite outgrowth inhibitor, Foocen, 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. Reticulons are involved in various neurodegenerative diseases such as Amyotrophic lateral sclerosis,and multiple sclerosis (Chiurchiù *et al.* 2014). Reticulon proteins have been demonstrated to regulate many cellular processes and interact with multiple proteins and receptors such as BACE. NogoA was initially identified as a myelin-associated neurite outgrowth inhibitor (Niederöst *et al.* 2002). NogoA is highly expressed in oligodendrocytes in the white matter of the CNS (Kuhlmann *et al.* 2008). Blocking NogoA activity with antibodies or other factors results in improved long distance axonal regeneration and functional recovery in experimental CNS lesion models (Schwab 2004). 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.
Histology Positive Control Tissue	Mouse brain
Western Blotting	AHP1799 detects a band of approximately 180 kDa in Mouse Brain tissue lysate.
References	1. Dann, A. *et al.* (2011) Cytosolic RIG-I-like helicases act as negative regulators of sterile inflammation in the CNS. Nat Neurosci. 15: 98-106. 2. Gerondopoulos, A. *et al.* (2014) Rab18 and a Rab18 GEF complex are required for normal ER structure. J Cell Biol. 205 (5): 707-20.

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.
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 #10040 available at: https://www.bio-rad-antibodies.com/SDS/AHP1799 10040
Regulatory	For research purposes only

Related Products

Recommended Useful Reagents

ANTIGEN RETRIEVAL BUFFER, pH8.0 (BUF025A)
TidyBlot WESTERN BLOT DETECTION REAGENT:HRP (STAR209P)

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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

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