

Datasheet: MCA1321GA

### **BATCH NUMBER 156334**

Description:	MOUSE ANTI RAT NEUROFILAMENT 200kDa
Specificity:	NEUROFILAMENT H 200kDa
Other names:	NEUROFILAMENT HEAVY POLYPEPTIDE
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	RT97
Isotype:	lgG1
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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			•	
Immunohistology - Frozen	•			
Immunohistology - Paraffin	•			1/50 - 1/100
ELISA			•	
Immunoprecipitation				
Western Blotting			•	

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	Rat
Species Cross Reactivity	Reacts with: Human, Chicken, Pig, Mouse Based on sequence similarity, is expected to react with:Reptile  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
Preparation	Purified IgG prepared by hydrophobic interaction chromatography from tissue culture

# supernatant

Buffer Solution	Phosphate buffered saline
Preservative	0.1% Sodium Azide (NaN <sub>3</sub> )
Stabilisers	0.1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	Triton X-100-insoluble rat brain protein.
External Database Links	UniProt:
	P16884 Related reagents
	Entrez Gene:
	24587 Nefh Related reagents
Symanyma	N.G.
Synonyms	Nfh
RRID	AB_1102789
Specificity	Mouse anti Rat Neurofilament 200kDa antibody, clone RT97 recognizes the 200kDa neurofilament protein in a range of species. Mouse anti Rat Neurofilament 200kDa antibody, clone RT97 stains various tumors including phaeochromocytoma, paraganglioma and ganglioneuroblastoma.
	Mouse anti Rat Neurofilament 200kDa antibody, clone RT97 also recognizes a phosphorylation dependent epitope on fetal tau, Alzheimer's paired helical filament-tau and on microtubule associated protein 1B (MAP1B) by western blotting, however similar reactivity was not apparent in immunohistochemical studies ( <u>Johnstone et al. 1997</u> ).
Immunohistology	This product does not require protein digestion pre-treatment of paraffin sections. This product does not require antigen retrieval using heat treatment prior to staining of paraffin sections.
Histology Positive Control Tissue	Brain or spinal cord
References	<ol> <li>Weber, K. <i>et al.</i> (1983) Neurofilaments, a subclass of intermediate filaments: structure and expression. Cold Spring Harb Symp Quant Biol. 48 Pt 2: 717-29.</li> <li>Anderton, B.H. <i>et al.</i> (1982) Monoclonal antibodies show that neurofibrillary tangles and neurofilaments share antigenic determinants. Nature. 298 (5869): 84-6.</li> <li>Johnstone, M. <i>et al.</i> (1997) The neurofilament antibody RT97 recognises a developmentally regulated phosphorylation epitope on microtubule-associated protein 1B. J Anat. 191 ( Pt 2): 229-44.</li> <li>Tonge, D.A. <i>et al.</i> (1996) Expression of a developmentally regulated, phosphorylated isoform of microtubule-associated protein 1B in sprouting and regenerating axons in vitro.</li> </ol>

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- 15. Yabe, J.T. *et al.* (2001) Neurofilaments consist of distinct populations that can be distinguished by C-terminal phosphorylation, bundling, and axonal transport rate in growing axonal neurites. <u>J Neurosci. 21: 2195-205.</u>
- 16. Wang, S. *et al.* (2000) Progressive optic axon dystrophy and vacuslar changes in rd mice. Invest Ophthalmol Vis Sci. 41: 537-45.
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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.

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1321GA">https://www.bio-rad-antibodies.com/SDS/MCA1321GA</a> 10041
Regulatory	For research purposes only

## Related Products

## **Recommended Secondary Antibodies**

Rabbit Anti Mouse IgG (STAR12...) **RPE** Goat Anti Mouse IgG IgA IgM (STAR87...) HRP Goat Anti Mouse IgG (STAR76...) **RPE** Goat Anti Mouse IgG (STAR70...) **FITC** Rabbit Anti Mouse IgG (STAR13...) **HRP** Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP Rabbit Anti Mouse IgG (STAR9...) **FITC** Goat Anti Mouse IgG (STAR77...) **HRP** 

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800,

FITC, HRP

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