

Datasheet: MCA1712

Description:	MOUSE ANTI GROWTH CONE
Specificity:	GROWTH CONE
Other names:	40S ribosomal protein SA
Format:	S/N
Product Type:	Monoclonal Antibody
Clone:	2G13
Isotype:	IgM
Quantity:	2 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			▪	

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. Clone 2G13 has also been reported to work in Western Blotting.

Target Species

Chicken

Species Cross Reactivity

Reacts with: Rat, 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

Tissue Culture Supernatant - liquid

Preparation

Tissue Culture Supernatant containing 0.2M Tris/HCl pH7.4 and 5-10% foetal calf serum

Preservative Stabilisers	0.09% Sodium Azide
Immunogen	Embryonic chick tectal membranes.
External Database Links	<p>UniProt: P50890 Related reagents</p> <p>Entrez Gene: 395181 RPSA Related reagents</p>
Synonyms	LAMR1
RRID	AB_322754
Fusion Partners	Spleen cells from immunised mice were fused with cells of the mouse NS1 myeloma cell line.
Specificity	<p>Mouse anti Growth Cone antibody, clone 2G13 recognizes a protein originally termed 2G13P which is localized to growth cones. Subsequent investigation has identified this protein to be 40S ribosomal protein SA, also known as 37 kDa laminin receptor precursor or Laminin receptor 1 (Baloui et al. 2004). 40S ribosomal protein SA is a 296 amino acid ~37 kDa membrane, cytoplasmic and nuclear protein required for the assembly and/or stability of the 40S ribosomal subunit.. In vertebrate evolution the molecule has acquired a secondary function as a laminin receptor (UniProt: P50890). In growth cones expression is notable particularly in filopodia and lamellipodia in developing rat CNS and embryonic neurons in culture (Stettler et al. 1999).</p> <p>40S ribosomal protein SA interacts with the filamentous actin cytoskeleton and therefore may be involved in growth cone motility (Stettler et al. 1999). Mouse anti Growth Cone antibody, clone 2G13 has been used for the detection of growth cones by immunohistochemistry and identification of 40S ribosomal protein SA by western blotting in chicken and rat samples (Baloui et al. 2004).</p>
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.
References	<ol style="list-style-type: none"> Baloui, H. <i>et al.</i> (2004) Cellular prion protein/laminin receptor: distribution in adult central nervous system and characterization of an isoform associated with a subtype of cortical neurons. Eur J Neurosci. 20 (10): 2605-16. Espejo, C. <i>et al.</i> (2005) Time-course expression of CNS inflammatory, neurodegenerative tissue repair markers and metallothioneins during experimental autoimmune encephalomyelitis. Neuroscience. 132(4):1135-49. Penkowa, M. <i>et al.</i> (2003) Metallothionein-I overexpression alters brain inflammation and stimulates brain repair in transgenic mice with astrocyte-targeted interleukin-6 expression. Glia. 42 (3): 287-306.

4. Kim, S.R. *et al.* (2011) Dopaminergic pathway reconstruction by Akt/Rheb-induced axon regeneration. [Ann Neurol. 70: 110-20.](#)
5. Nordman, J.C. & Kabbani, N. (2012) An interaction between $\alpha 7$ nicotinic receptors and a G-protein pathway complex regulates neurite growth in neural cells. [J Cell Sci. 125 \(Pt 22\): 5502-13.](#)

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 #10053 available at: 10053: <https://www.bio-rad-antibodies.com/uploads/MSDS/10053.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgM (STAR138...) [Alk. Phos.](#)
Human Anti Mouse IgM (HCA040...) [FITC](#)
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)

Recommended Useful Reagents

[MOUSE ANTI CHICKEN CD184 / CXCR4 \(MCA6012GA\)](#)

North & South America	Tel: +1 800 265 7376 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
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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)
'M383148:210513'

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