Datasheet: MCA1712 BATCH NUMBER 1608

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

Product Details

Applications	This product has been re	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 r	ecommer	ndations please visit w	ww.bio-		
	rad antibadios com/proto		oconinio				
	Tad-antibodies.com/proto	Vee	No	Not Determined	Suggested Dilution		
	Flow Outomoting	res		Not Determined	Suggested Dilution		
			-				
	Immunonistology - 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 u	se in sucl	n procedu	ires. It is recommended	d that the user titrates		
	the antibody for use in th	the antibody for use in their own system using appropriate negative/positive controls					
	Clone 2G13 has also be	on reporte	d to work	(in Western Blotting	o,poolaro oona olor		
	CIONE 2013 Has also bee	entepolie		the western blotting.			
Target Species	Chicken						
Species Cross	Reacts with: Rat, Mouse						
Reactivity	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 communication	nersonal communications from the originators. Please refer to references indicated for					
	further information.	o nom are	onginate				
Product Form	Tissue Culture Supernata	ant - liquio	b				
Preparation	Tissue Culture Supernata	ant contai	ning 0.2N	/ Tris/HCl pH7.4 and 5	-10% foetal calf serum		

Preservative Stabilisers	0.09% Sodium Azide
Immunogen	Embryonic chick tectal membranes.
External Database Links	UniProt: <u>P50890</u> <u>Related reagents</u> Entrez Gene: 395181 RPSA Related reagents
Synonyms	LAMR1
RRID	AB_322754
Fusion Partners	Spleen cells from immunised mice were fused with cells of the mouse NS1 myeloma cell line.
Specificity	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 <i>et al.</i> 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 (<u>UniProt: P50890</u>). In growth cones expression is notable particularly in filopodia and lamellipodia in developing rat CNS and embryonic neurons in culture (<u>Stettler <i>et al.</i> 1999</u>).
	40S ribosomal protein SA interacts with the filamentous actin cytoskeleton and therefore may be involved in growth cone motility (<u>Stettler <i>et al.</i> 1999</u>). 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 (<u>Baloui <i>et al.</i> 2004</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.
References	 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. <u>Eur J Neurosci. 20 (10): 2605-16.</u> Espejo, C. <i>et al.</i> (2005) Time-course expression of CNS inflammatory, neurodegenerative tissue repair markers and metallothioneins during experimental autoimmune encephalomyelitis. <u>Neuroscience. 132(4):1135-49.</u> 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. <u>Glia. 42 (3): 287-306.</u>

	 4. Kim, S.R. <i>et al.</i> (2011) Dopaminergic pathway reconstruction regeneration. <u>Ann Neurol. 70: 110-20.</u> 5. Nordman, J.C. & Kabbani, N. (2012) An interaction between a G-protein pathway complex regulates neurite growth in neural <u>22): 5502-13.</u> 	n by Akt/Rheb-induced axon α7 nicotinic receptors and al cells. <u>J Cell Sci. 125 (Pt</u>
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 repear as this may denature the antibody. Should this product contain recommend microcentrifugation before use.	ated freezing and thawing a precipitate we
Guarantee	12 months from date of despatch	
Health And Safety Information	Material Safety Datasheet documentation #10053 available at: https://www.bio-rad-antibodies.com/SDS/MCA1712 10053	
Regulatory	For research purposes only	

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgM (STAR138...) Alk. Phos.

Goat Anti Mouse IgG IgA IgM (STAR87...) <u>HRP</u>

Recommended Useful Reagents

MOUSE ANTI CHICKEN CD184 / CXCR4 (MCA6012GA)

North & South	Tel: +1 800 265 7376 Worl	ldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 2	21
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95	50
	Email: antibody_sales_us@bio-rad.com		Email: antibody_sales_uk@bio-rad.	com	Email: antibody_sales_de	e@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 M365626:200529'

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