Datasheet: MCA408S

BATCH NUMBER 147864

Description:	RAT ANTI MBP (aa36-50)
Specificity:	MBP (aa36-50)
Other names:	MYELIN BASIC PROTEIN
Format:	S/N
Product Type:	Monoclonal Antibody
Clone:	14
Isotype:	IgG2b
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 (1)	▪			
Immunohistology - Paraffin		▪		
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting			▪	
Immunofluorescence	▪			

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)**The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Bio-Rad recommends the use of acetone fixation for frozen sections.**

Target Species

Bovine

Species Cross Reactivity

Reacts with: Human

Based on sequence similarity, is expected to react with:Chicken, Horse

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
Preservative Stabilisers	0.09% Sodium Azide
Immunogen	Bovine myelin basic protein
External Database Links	**UniProt:** P02687 Related reagents **Entrez Gene:** 618684 MBP Related reagents
RRID	AB_325007
Fusion Partners	Spleen cells from immunised outbred rats were fused with cells of the mouse NS0 myeloma cell line.
Specificity	**Rat anti MBP antibody, clone 14** recognizes myelin basic protein (MBP), a component of myelin that is beleived to play a role in the myelination of nerves in the central nervous system. Rat anti MBP antibody, clone 14 has also been reported to work in western blotting (Relucio *et al.* 2009).
References	1. Groome, N.P. *et al.* (1986) Region-specific immunoassays for human myelin basic protein. J Neuroimmunol. 12 (4): 253-64. 2. Glynn, P. *et al.* (1987) Basic protein dissociating from myelin membranes at physiological ionic strength and pH is cleaved into three major fragments. J Neurochem. 48 (3): 752-9. 3. Groome, N. *et al.* (1988) New monoclonal antibodies reactive with defined sequential epitopes in human myelin basic protein. J Neuroimmunol. 19 (4): 305-15. 4. Matsuo, A. *et al.* (1997) Unmasking of an unusual myelin basic protein epitope during the process of myelin degeneration in humans: a potential mechanism for the generation of autoantigens. Am J Pathol. 150: 1253-66. 5. Jackson, S.J. *et al.* (2004) Cannabinoid-mediated neuroprotection following interferon-gamma treatment in a three-dimensional mouse brain aggregate cell culture. Eur J Neurosci. 20: 2267-75. 6. Friess, M. *et al.* (2016) Intracellular ion signaling influences myelin basic protein synthesis in oligodendrocyte precursor cells. Cell Calcium. 60 (5): 322-30. 7. Ou-yang, M.H. *et al.* (2015) N-terminal region of myelin basic protein reduces fibrillar amyloid-β deposition in Tg-5xFAD mice. Neurobiol Aging. 36 (2): 801-11. 8. Biffi, A. *et al.* (2006) Gene therapy of metachromatic leukodystrophy reverses neurological damage and deficits in mice. J Clin Invest. 116 (11): 3070-82.

9. Copray, J.C. *et al.* (2005) p75NTR independent oligodendrocyte death in cuprizone-induced demyelination in C57BL/6 mice. Neuropathol Appl Neurobiol. 31 (6): 600-9.
10. Jagielska, A. *et al.* (2017) Mechanical Strain Promotes Oligodendrocyte Differentiation by Global Changes of Gene Expression. Front Cell Neurosci. 11: 93.

Storage	Store at +4°C or at -20°C if preferred. This product should be stored undiluted. 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 #10055 available at: https://www.bio-rad-antibodies.com/SDS/MCA408S 10055
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®550, DyLight®650, DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos., Biotin

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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
'M367664:200529'

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