

Datasheet: MCA2769

Description:	MOUSE ANTI HUMAN S100 PROTEIN
Specificity:	S100
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	8B10
Isotype:	IgG1
Quantity:	0.2 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
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.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Approx. Protein Concentrations	IgG concentration 1 mg/ml
Immunogen	Human brain S100 protein
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the Sp2/0 myeloma cell line.
Specificity	Mouse anti Human S100 Protein antibody, clone 8B10 recognizes S100 protein derived from human brain tissue. It is a 21kDa acidic calcium-binding protein synthesised by astroglial cells. It

can be found predominantly as two isoforms, the alpha-beta heterodimer (S100a) and the beta-beta homodimer (S100b). The S100 family of proteins have been implicated in a large variety of intracellular and extracellular regulatory activities, such as cellular energy metabolism, cytoskeleton modification, cell proliferation and differentiation.

When glial cells are damaged, S100 protein is leaked into the extracellular matrix and cerebrospinal fluid, further releasing into the bloodstream. S100 protein can be used as a sensitive and reliable marker for nervous system damage, such as after brain damage or acute stroke.

Mouse anti Human S100 Protein antibody, clone 8B10 recognizes both S100a (alpha-beta) and S100b (beta-beta).

Mouse anti Human S100 Protein antibody, clone 8B10 is sensitive to EDTA and other bivalent-binding agents. Improved performance can be obtained in the presence of 5mM CaCl₂ in assay buffers.

References

1. Valencia, K. *et al.* (2012) Inhibition of collagen receptor discoidin domain receptor-1 (DDR1) reduces cell survival, homing, and colonization in lung cancer bone metastasis. [Clin Cancer Res. 18 \(4\): 969-80.](#)
2. Etherington S. J. *et al.* (2016) Heterochronic neuromuscular junction development in an Australian marsupial (*Macropus fuliginosus*) [Journal of Zoology. 300 \(1\): 27-35.](#)

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.

Shelf Life

18 months from date of despatch.

Health And Safety Information

Material Safety Datasheet documentation #10040 available at: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Human Anti Mouse IgG1 (HCA036...)	HRP

Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®549](#),
[DyLight®649](#), [DyLight®680](#), [DyLight®800](#),
[FITC](#), [HRP](#)

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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
----------------------------------	---	------------------	---	---------------	---

'M319140:180719'

Printed on 01 Aug 2018

© 2018 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)