

Datasheet: MCA2772

Description:	MOUSE ANTI HUMAN S100 PROTEIN ALPHA/BETA
Specificity:	S100 ALPHA/BETA
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	3B10
Isotype:	IgG2a
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 alpha/beta antibody, clone 3B10 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 S-100 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 alpha/beta antibody, clone 3B10 recognizes S100a (the alpha-beta heterodimer).

Mouse anti Human S100 Protein alpha/beta antibody, clone 3B10 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. Paus, E. *et al.* (2011) TD-11 workshop report: characterization of monoclonal antibodies to S100 proteins. [Tumour Biol. 32 \(1\): 1-12.](#)

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 available at:
Material Safety Datasheet Documentation #10040 available at:
<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](#)
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight@488](#), [DyLight@549](#),
[DyLight@649](#), [DyLight@680](#), [DyLight@800](#),
[FITC](#), [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](#)
Human Anti Mouse IgG2a (HCA037...) [FITC](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)

Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL (MCA929)

North & South Tel: +1 800 265 7376

America 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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