

## Datasheet: MCA2770

<b>Description:</b>	MOUSE ANTI HUMAN S100 PROTEIN
<b>Specificity:</b>	S100
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	6G1
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://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.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Approx. Protein Concentrations</b>	IgG concentration 1 mg/ml
<b>Immunogen</b>	Human brain S100 protein.
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the Sp2/0 myeloma cell line.
<b>Specificity</b>	<b>Mouse anti Human S100 Protein antibody, clone 6G1</b> recognizes S100 protein derived from human brain tissue. It is a ~21 kDa 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. As such, 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 6G1 recognizes both S100a (alpha-beta) and S100b (beta-beta).

Mouse anti Human S100 Protein antibody, clone 6G1 is sensitive to EDTA and other bivalent-binding agents. Better performance can be obtained in the presence of 5mM CaCl<sub>2</sub> in assay buffers.

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**References**

1. Paus, E. *et al.* (2011) TD-11 workshop report: characterization of monoclonal antibodies to S100 proteins. [Tumour Biol. 32 \(1\): 1-12.](#)
2. Wang, Q. *et al.* (2012) Evaluation of human brain damage in fatalities due to extreme environmental temperature by quantification of basic fibroblast growth factor (bFGF), glial fibrillary acidic protein (GFAP), S100β and single-stranded DNA (ssDNA) immunoreactivities. [Forensic Sci Int. 219 \(1-3\): 259-64.](#)

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**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.

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**Shelf Life**

18 months from date of despatch.

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**Health And Safety Information**

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

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR8...)	<a href="#">DyLight@800</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">Alk. Phos.</a> , <a href="#">HRP</a>

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](#)  
Human Anti Mouse IgG1 (HCA036...) [HRP](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)

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