

## Purified anti-S100B Antibody

<b>Catalog# / Size</b>	676603 / 25 µg 676604 / 100 µg
<b>Clone</b>	11C12E12
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	S-100 protein beta chain, S-100 protein subunit beta, S100 calcium-binding protein B
<b>Isotype</b>	Mouse IgG1
<b>Description</b>	S100B is glial-specific. It has been shown that it is only expressed by a subtype of mature astrocytes that ensheath blood vessels, and by NG2-expressing cells. This protein may function in neurite extension, stimulation of Ca <sup>2+</sup> fluxes, inhibition of PKC-mediated phosphorylation, astrocytosis and axonal proliferation, and inhibition of microtubule assembly. In the developing central nervous system (CNS), it acts as a neurotrophic factor and neuronal survival protein. In the adult organism, it is usually elevated due to nervous system damage, which makes it a potential clinical marker. S100B is secreted by astrocytes or can spill from injured cells and enter the extracellular space or bloodstream. Serum levels of S100B increase in patients during the acute phase of brain damage. Over the last decade, S100B has emerged as a candidate peripheral biomarker of blood–brain barrier (BBB) permeability and central nervous system injury.

### Product Details

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<b>Reactivity</b>	Human, Mouse, Rat
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Full length recombinant human S100B protein.
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Preparation</b>	The antibody was purified by affinity chromatography.
<b>Concentration</b>	0.5 mg/ml
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C.
<b>Application</b>	<a href="#">WB - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">Western blotting</a> . For Western blotting, the suggested use of this reagent is 0.5 - 2.0 µg per ml. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Product Citations</b>	1. Keck S, <i>et al.</i> 2021. Cellular and Molecular Gastroenterology and Hepatology. 12(2):507-545. <a href="#">PubMed</a>
<b>RRID</b>	AB_2734531 (BioLegend Cat. No. 676603) AB_2571890 (BioLegend Cat. No. 676604)

### Antigen Details

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<b>Structure</b>	92 amino acids with a predicted molecular weight of approximately 10.7 kD.
<b>Distribution</b>	Mainly expressed in mature astrocytes of the brain. It is also found in a variety of other cell types such as T lymphocytes, monocytes, and platelets.
<b>Function</b>	Neurite extension, stimulation of Ca <sup>2+</sup> fluxes, inhibition of PKC-mediated phosphorylation, astrocytosis and axonal proliferation, and inhibition of microtubule assembly.

<b>Interaction</b>	STK38, CACYBP, ATAD3A, S100A6, CAPZA1, AGER, and PPP5C.
<b>Cell Type</b>	Astrocytes
<b>Biology Area</b>	Cell Biology, Immunology, Neuroinflammation, Neuroscience, Neuroscience Cell Markers, Signal Transduction
<b>Antigen References</b>	<ol style="list-style-type: none"> <li>1. Wang D, <i>et al.</i> 2008. <i>Prog. Neurobiol.</i> 86:342.</li> <li>2. Michetti F, <i>et al.</i> 2012. <i>J. Neurochem.</i> 120:644.</li> <li>3. Zongo D, <i>et al.</i> 2012. <i>Annals. of Emergency Medicine</i> 59:209.</li> <li>4. Deloulme J, <i>et al.</i> 2000. <i>J. Biol. Chem.</i> 275:35302-10.</li> </ol>
<b>Gene ID</b>	<a href="#">6285</a>

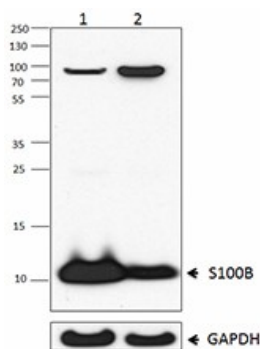
## Related Protocols

[Western Blotting Protocol](#)

## Other Formats

Purified anti-S100B

## Product Data



Western blot analysis of rat brain (lane 1) and mouse brain (lane 2). Anti-S100B antibody (clone 11C12E12) was used, followed by HRP Goat anti-mouse IgG (minimal x-reactivity) antibody. Purified anti-GAPDH antibody was used as a loading control. We are not sure about the specificity of the high molecular weight band.

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