

Purified anti-S100B Antibody

Catalog# / Size	676603 / 25 µg 676604 / 100 µg
Clone	11C12E12
Regulatory Status	RUO
Other Names	S-100 protein beta chain, S-100 protein subunit beta, S100 calcium-binding protein B
Isotype	Mouse IgG1
Description	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 ²⁺ 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

Verified Reactivity	Human, Mouse, Rat
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Full length recombinant human S100B protein.
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	WB - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by Western blotting . 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.
Product Citations	1. Keck S, <i>et al.</i> 2021. Cellular and Molecular Gastroenterology and Hepatology. 12(2):507-545. PubMed
RRID	AB_2734531 (BioLegend Cat. No. 676603) AB_2571890 (BioLegend Cat. No. 676604)

Antigen Details

Structure	92 amino acids with a predicted molecular weight of approximately 10.7 kD.
Distribution	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.
Function	Neurite extension, stimulation of Ca ²⁺ fluxes, inhibition of PKC-mediated phosphorylation, astrocytosis and axonal proliferation, and inhibition of microtubule assembly.

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

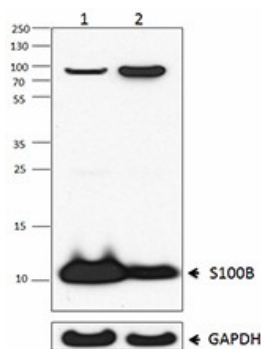
Related Protocols

[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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