

# PRODUCT INFORMATION



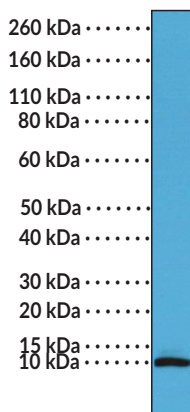
## S100B (C-Term) Rabbit Monoclonal Antibody (Clone RM304)

Item No. 32249

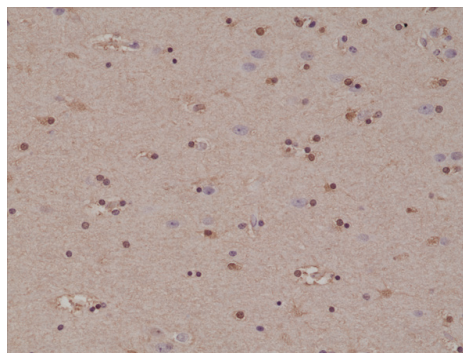
### Overview and Properties

<b>Contents:</b>	This vial contains 100 $\mu$ l of protein A-affinity purified monoclonal antibody.
<b>Synonyms:</b>	S100 Calcium-binding Protein B, S100 Protein $\beta$ Chain, S100 Protein Subunit $\beta$ , S100 $\beta$
<b>Immunogen:</b>	Peptide from the C-terminal region of human S100B
<b>Cross Reactivity:</b>	(+) S100B
<b>Species Reactivity:</b>	(+) Human
<b>Form:</b>	Liquid
<b>Storage:</b>	-20°C (as supplied)
<b>Stability:</b>	$\geq$ 1 year
<b>Storage Buffer:</b>	PBS with 50% glycerol, 1% BSA, and 0.09% sodium azide
<b>Clone:</b>	RM304
<b>Host:</b>	Rabbit
<b>Isotype:</b>	IgG
<b>Applications:</b>	Immunohistochemistry (IHC) and Western blot (WB); the recommended starting dilution is 1:500-1:1,000 for IHC and 1:100-1:200 for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

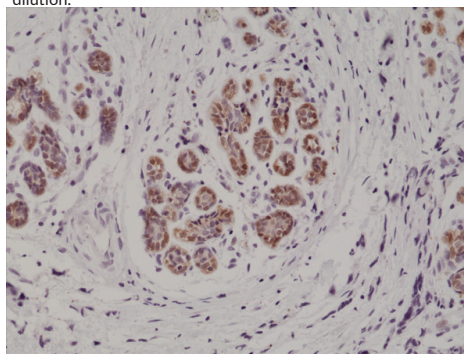
### Images



WB of human brain tissue lysate using S100B (C-Term) Rabbit Monoclonal Antibody (Clone RM304) at a dilution of 1:100.



Immunohistochemical staining of formalin-fixed and paraffin-embedded human brain tissue using S100B (C-Term) Rabbit Monoclonal Antibody (Clone RM304) at a 1:1,000 dilution.



Immunohistochemical staining of formalin-fixed and paraffin-embedded human breast cancer tissue using S100B (C-Term) Rabbit Monoclonal Antibody (Clone RM304) at a 1:1,000 dilution.

**WARNING**  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

**SAFETY DATA**  
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

**WARRANTY AND LIMITATION OF REMEDY**  
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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## Description

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S100 calcium-binding protein B (S100B) is a calcium-binding protein.<sup>1</sup> It is a homodimer, with each subunit containing two EF-hand calcium-binding domains. S100B is expressed primarily in astrocytes but also by neural progenitor cells, dendritic cells, some lymphocyte subpopulations, and maturing oligodendrocytes. S100B has intracellular roles in calcium homeostasis, cell proliferation, energy metabolism, cytoskeletal regulation, and motility. It is also released extracellularly in response to various forms of brain injury and acts as a damage-associated molecular pattern (DAMP) through its interaction with receptor for advanced glycation end products (RAGE).<sup>1-4</sup> Peripheral blood levels of S100B are increased in patients with autism spectrum disorder, acute ischemic stroke, or neonatal brain injury.<sup>3-4</sup> Cayman's S100B (C-Term) Rabbit Monoclonal Antibody (Clone RM304) can be used for immunohistochemistry (IHC) and Western blot (WB) applications.

## References

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1. Angelopoulou, E., Paudel, Y.N., and Piperi, C. Emerging role of S100B protein implication in Parkinson's disease pathogenesis. *Cell. Mol. Life Sci.* (2020).
2. Zheng, Z., Zheng, P., and Zou, X. Peripheral blood S100B levels in autism spectrum disorder: A systematic review and meta-analysis. *J. Autism Dev. Disord.* (2020).
3. Onatsu, J., Vanninen, R., Jäkälä, P., et al. Tau, S100B and NSE as blood biomarkers in acute cerebrovascular events. *In Vivo* **34(5)**, 2577-2586 (2020).
4. Metallinou, D., Karampas, G., Nyktari, G., et al. S100B as a biomarker of brain injury in premature neonates. A prospective case - control longitudinal study. *Clin. Chim. Acta* **510**, 781-786 (2020).

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