

For Research Use Only

# S100B Monoclonal antibody

Catalog Number: 66616-1-Ig **21 Publications**



## Basic Information

|                                                                |                                                     |                                                                                                                  |
|----------------------------------------------------------------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| <b>Catalog Number:</b><br>66616-1-Ig                           | <b>GenBank Accession Number:</b><br>BC001766        | <b>Purification Method:</b><br>Protein G purification                                                            |
| <b>Size:</b><br>150ul , Concentration: 1000 ug/ml by Nanodrop; | <b>GeneID (NCBI):</b><br>6285                       | <b>CloneNo.:</b><br>1G10F4                                                                                       |
| <b>Source:</b><br>Mouse                                        | <b>UNIPROT ID:</b><br>P04271                        | <b>Recommended Dilutions:</b><br>WB 1:1000-1:2000<br>IHC 1:1000-1:8000<br>IF-P 1:200-1:800<br>IF-Fro 1:200-1:800 |
| <b>Isotype:</b><br>IgG1                                        | <b>Full Name:</b><br>S100 calcium binding protein B |                                                                                                                  |
| <b>Immunogen Catalog Number:</b><br>AG7440                     | <b>Calculated MW:</b><br>11 kDa                     |                                                                                                                  |
|                                                                | <b>Observed MW:</b><br>11 kDa                       |                                                                                                                  |

## Applications

|                                                                                                                                                      |                                                                                                                                                                                                                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tested Applications:</b><br>WB, IHC, IF-P, IF-Fro, ELISA                                                                                          | <b>Positive Controls:</b><br><b>WB :</b> rabbit brain tissue, rat brain tissue, rat cerebellum tissue, rat spinal cord tissue<br><b>IHC :</b> rat brain tissue, human appendicitis tissue<br><b>IF-P :</b> rat brain tissue,<br><b>IF-Fro :</b> mouse brain tissue, |
| <b>Cited Applications:</b><br>WB, IHC, IF                                                                                                            |                                                                                                                                                                                                                                                                     |
| <b>Species Specificity:</b><br>human, rat                                                                                                            |                                                                                                                                                                                                                                                                     |
| <b>Cited Species:</b><br>human, rat                                                                                                                  |                                                                                                                                                                                                                                                                     |
| <b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b> |                                                                                                                                                                                                                                                                     |

## Background Information

S100B is a member of the S100 family of proteins containing 2 EF-hand calcium-binding motifs and has been implicated in the regulation of cellular activities such as metabolism, motility and proliferation. In the nervous system, S100B is constitutively released by astrocytes into the extracellular space and at nanomolar concentrations, it can promote neurite outgrowth and protect neurons against oxidative stress. Within the central nervous system (CNS), S100B is thought to be a marker for astroglial activation, linking astrocyte dysfunction to schizophrenia. In addition to astrocytes, S100B is released from many cell types, such as, adipocytes, chondrocytes, cardiomyocytes and lymphocytes. Serum S100B represents a new biomarker for mood disorders.

## Notable Publications

| Author       | Pubmed ID | Journal                 | Application |
|--------------|-----------|-------------------------|-------------|
| Vedad Delic  | 36435806  | Acta Neuropathol Commun | WB          |
| Zhaoyang Wu  | 36370841  | Exp Neurol              | IF          |
| Zhigang Wang | 34118692  | Transl Oncol            | IF          |

## Storage

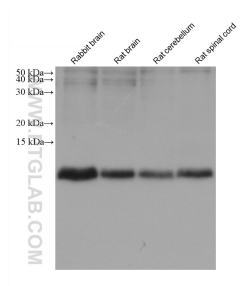
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

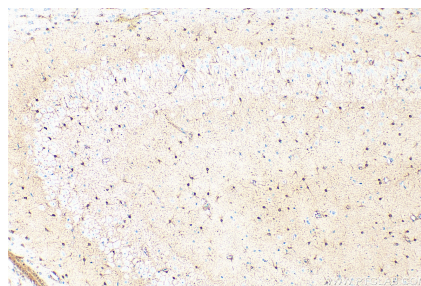
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

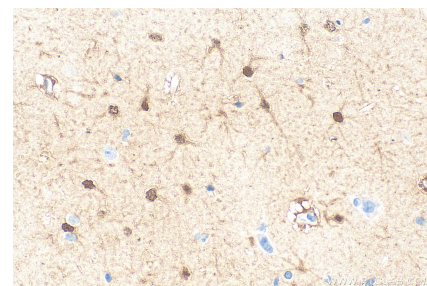
## Selected Validation Data



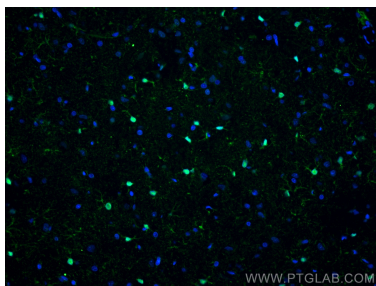
Various lysates were subjected to SDS PAGE followed by western blot with 66616-1-Ig (S100B antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



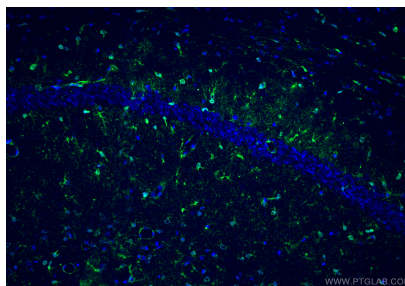
Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using 66616-1-Ig (S100B antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using 66616-1-Ig (S100B antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed rat brain tissue using S100 Beta antibody (66616-1-Ig, Clone: 1G10F4) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse brain tissue using S100B antibody (66616-1-Ig, Clone: 1G10F4) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1).