

For Research Use Only

# S100 Beta Polyclonal antibody

Catalog Number: 15146-1-AP **89 Publications**



## Basic Information

<b>Catalog Number:</b> 15146-1-AP	<b>GenBank Accession Number:</b> BC001766	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 1000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 6285	<b>Recommended Dilutions:</b> WB 1:500-1:1000 IHC 1:1000-1:6000 IF 1:50-1:500
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P04271	
<b>Isotype:</b> IgG	<b>Full Name:</b> S100 calcium binding protein B	
<b>Immunogen Catalog Number:</b> AG7440	<b>Calculated MW:</b> 11 kDa	
	<b>Observed MW:</b> 11 kDa	

## Applications

**Tested Applications:**  
WB, IF, FC, IHC, ELISA

**Cited Applications:**  
WB, IF, FC, IHC

**Species Specificity:**  
human, mouse, rat

**Cited Species:**  
human, rat, mouse

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

**WB :** A375 cells, mouse brain tissue, human testis tissue, human brain tissue, U-251 cells, C6 cells

**IHC :** human malignant melanoma tissue, human gliomas tissue, mouse brain tissue, human appendicitis tissue

**IF :** mouse brain tissue, human astrocytes, A375 cells, mouse cerebellum tissue, human malignant melanoma tissue

## 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
Yu-Pu Liu	30261232	Neurosci Lett	IF
Liang Yan	36144631	Molecules	
Dipro Bose	32927823	Nutrients	IF

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

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

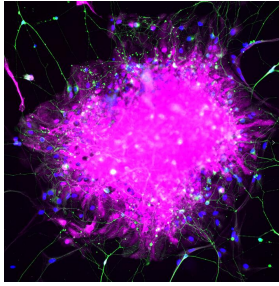
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

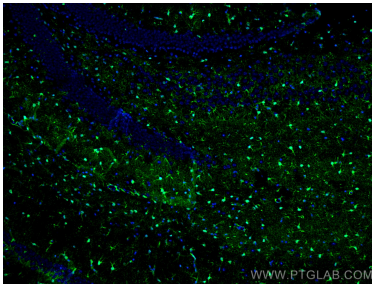
E: proteintech@ptglab.com  
W: ptglab.com

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

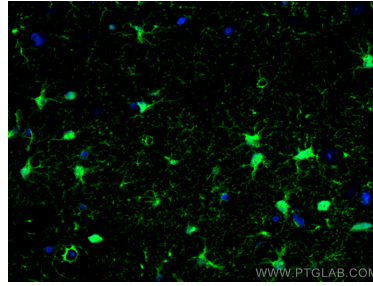
## Selected Validation Data



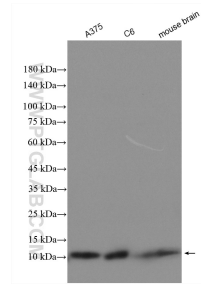
Immunofluorescence analysis of human pluripotent stem cell-derived astrocytes with S100 $\beta$  (15146-1-AP) at 1/200 (Magenta) and neurons with TUJ1 (66375-1-Ig) at 1:500 (Green). The sample was fixed with 4% Paraformaldehyde and permeabilized with 0.3% Triton X-100. Alexa Fluor 488-conjugated goat anti-mouse IgG (1/500) and Alexa Fluor 594-conjugated goat anti-rabbit IgG (1/500) were used as the secondary antibodies. Nuclei were counterstained with



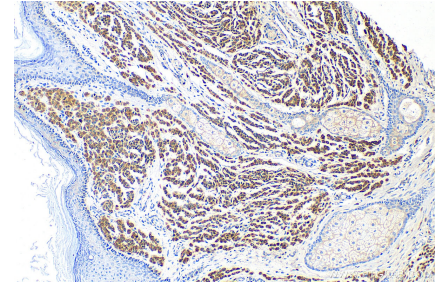
Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using S100 Beta antibody (15146-1-AP) at dilution of 1:200 and CoraLite $\text{\textcircled{R}}$ 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



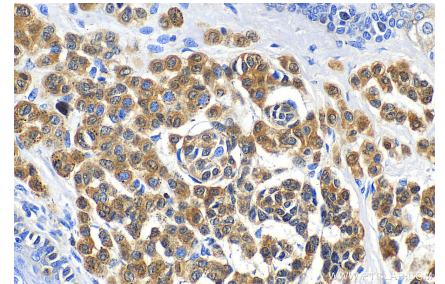
Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using S100 Beta antibody (15146-1-AP) at dilution of 1:200 and CoraLite $\text{\textcircled{R}}$ 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



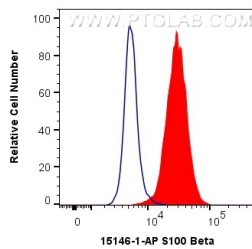
Various lysates were subjected to SDS PAGE followed by western blot with 15146-1-AP (S100 beta antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human malignant melanoma tissue slide using 15146-1-AP (S100 Beta antibody) at dilution of 1:6000 (under 10x Lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human malignant melanoma tissue slide using 15146-1-AP (S100 Beta antibody) at dilution of 1:6000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10<sup>6</sup> A375 cells were intracellularly stained with 0.5 ug Anti-Human S100 Beta (15146-1-AP) and CoraLite $\text{\textcircled{R}}$ 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.5 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).