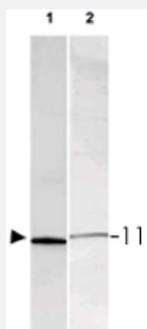


# S100A1/S100B polyclonal antibody

Catalog # PAB11341

Size 500 ug

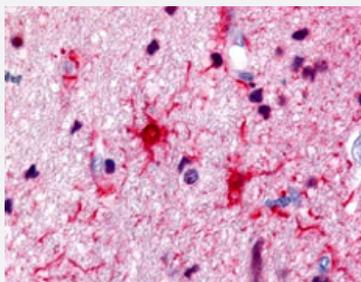
## Applications



### Western Blot

Western blot using S100A1/S100B polyclonal antibody (Cat # PAB11341) shows detection of a band ~11 kDa corresponding to bovine S100A1/S100B monomer (100 ng loaded, arrowhead lane 1).

The antibody also detects S100A1/S100B from rat brain lysate (Lane 2). Approximately 35 ug of a rat brain whole cell lysate was separated by 16% SDS-PAGE and transferred onto nitrocellulose.

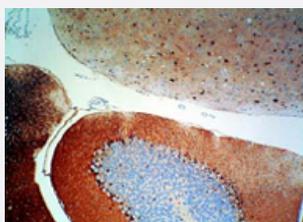


### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemistry of S100A1/S100B polyclonal antibody (Cat # PAB11341) was used at a 1:500 dilution to detect S100A1/S100B by immunohistochemistry in human brain astrocyte tumor tissue.

Tissue was formalin-fixed and paraffin embedded.

Personal Communication, Alan Yen, Life Span Biosciences, Seattle, WA.



### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemistry of S100A1/S100B polyclonal antibody (Cat # PAB11341) was used at a 1:500 dilution to detect S100A1/S100B.

Dark nuclear staining is observed within basket cells located near the Purkinje cells in the mouse cerebellum.

Personal Communication, Teri Johnson, Stowers Institute, Kansas City, MO.

## Specification

### Product Description

Rabbit polyclonal antibody raised against full length recombinant S100A1/S100B.

<b>Immunogen</b>	Recombinant protein corresponding to full length bovine S100A1/S100B.
<b>Host</b>	Rabbit
<b>Reactivity</b>	Bovine, Dog, Mouse, Rat
<b>Specificity</b>	A 98% homology is noted for S100 alpha chain from primate sources. Mouse, rat and dog show 94 % homology with the bovine S100 alpha sequence. Expect cross reactivity with S100 from most mammalian sources. Homologies for the S100 beta chain are similar.
<b>Form</b>	Lyophilized
<b>Quality Control Testing</b>	Antibody Reactive Against Recombinant Protein.
<b>Recommend Usage</b>	ELISA (1:5000-1:25000) Western Blot (1:500-1:3000) Immunohistochemistry (1:200-1:2000) The optimal working dilution should be determined by the end user.
<b>Storage Buffer</b>	Lyophilized from 20 mM KH <sub>2</sub> PO <sub>4</sub> , 150 mM NaCl, pH 7.2 (0.01% sodium azide)
<b>Storage Instruction</b>	Store at 4°C. For long term storage store at -20°C. Aliquot after reconstitution to avoid repeated freezing and thawing.
<b>Note</b>	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

## Applications

- Western Blot

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Personal Communication, Teri Johnson, Stowers Institute, Kansas City, MO.

- Enzyme-linked Immunoabsorbent Assay

## Gene Info — S100B

Entrez GeneID	<a href="#">525716</a>
Protein Accession#	<a href="#">P02639 (Bovine gene ID : 528735)</a>
Gene Name	S100B
Gene Alias	MGC128275
Gene Description	S100 calcium binding protein B
Gene Ontology	<a href="#">Hyperlink</a>
Gene Summary	beta polypeptide
Other Designations	S100 protein, beta polypeptide

## Gene Info — S100A1

Entrez GeneID	<a href="#">528735</a>
Protein Accession#	<a href="#">P02639 (Bovine gene ID : 528735)</a>
Gene Name	S100A1
Gene Alias	MGC159706
Gene Description	S100 calcium binding protein A1
Gene Ontology	<a href="#">Hyperlink</a>
Other Designations	-

## Publication Reference

- [Acidic nanoparticles protect against  \$\alpha\$ -synuclein-induced neurodegeneration through the restoration of lysosomal function.](#)

Marie-Laure Arotcarena, Federico N Soria, Anthony Cunha, Evelyne Doudnikoff, Geoffrey Prévot, Jonathan Daniel, Mireille Blanchard-Desce, Philippe Barthélémy, Erwan Bezard, Sylvie Crauste-Manciet, Benjamin Dehay.

Aging Cell 2022 Apr; 21(4):e13584.

Application: IHC, Mouse, Striatum, Substantia nigra

- [Brain injections of glial cytoplasmic inclusions induce a multiple system atrophy-like pathology.](#)

Margaux Teil, Sandra Dovero, Mathieu Bourdenx, Marie-Laure Arotcarena, Sandrine Camus, Gregory Porras, Marie-Laure Thiolat, Ines Trigo-Damas, Celine Perier, Cristina Estrada, Nuria Garcia-Carrillo, Michele Morari, Wassilios G Meissner, María Trinidad Herrero, Miquel Vila, Jose A Obeso, Erwan Bezard, Benjamin Dehay.

Brain 2022 Apr; 145(3):1001.

Application: IHC-Fr, Baboon, Baboon brain striatal

- [Transcription factor EB overexpression prevents neurodegeneration in experimental synucleinopathies.](#)

Arotcarena ML, Bourdenx M, Dutheil N, Thiolat ML, Doudnikoff E, Dovero S, Ballabio A, Fernagut PO, Meissner WG, Bezard E, Dehay B.

JCI Insight 2019 Aug; 4(16):129719.

Application: IHC-P, Mouse, Mouse striatal sections

- [Astrocytosis in parkinsonism: considering tripartite striatal synapses in physiopathology?](#)

Charron G, Doudnikoff E, Canron MH, Li Q, Véga C, Marais S, Baufreton J, Vital A, Oliet SH, Bezard E.

Frontiers in Aging Neuroscience 2014 Sep; 6:258.

Application: IHC, Mouse, Rat, Brain

- [Endogenous morphine-like compound immunoreactivity increases in parkinsonism.](#)

Charron G, Doudnikoff E, Laux A, Berthet A, Porras G, Canron MH, Barroso-Chinea P, Li Q, Qin C, Nosten-Bertrand M, Giros B, Delalande F, Van Dorsselaer A, Vital A, Goumon Y, Bezard E.

Brain 2011 Aug; 134(Pt 8):2321.

Application: IF, Rat, Brain

- [S100 beta is a target protein of neurocalcin delta, an abundant isoform in glial cells.](#)

Okazaki K, Obata NH, Inoue S, Hidaka H.

The Biochemical Journal 1995 Mar; 306 ( Pt 2)(Pt 2):551.

- [Molecular cloning of cDNA of S100 alpha subunit mRNA.](#)

Kuwano R, Maeda T, Usui H, Araki K, Yamakuni T, Ohshima Y, Kurihara T, Takahashi Y.

FEBS Letters 1986 Jun; 202(1):97.

- [Ions binding to S100 proteins: structural changes induced by calcium and zinc on S100a and S100b proteins.](#)

Baudier J, Gerard D.

Biochemistry 1983 Jul; 22(14):3360.