

S100B / S100 Beta Antibody (clone 9A11B9)
Mouse Monoclonal Antibody
Catalog # ALS12831**Specification**

S100B / S100 Beta Antibody (clone 9A11B9) - Product Information

Application	WB, IHC
Primary Accession	P04271
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	11kDa KDa

S100B / S100 Beta Antibody (clone 9A11B9) - Additional Information**Gene ID** 6285**Other Names**

Protein S100-B, S-100 protein beta chain, S-100 protein subunit beta, S100 calcium-binding protein B, S100B

Target/Specificity

Purified full-length recombinant S100B-GST expressed in E. Coli strain BL21 (DE3)

Reconstitution & Storage

Long term: -20°C; Short term: -20°C

Precautions

S100B / S100 Beta Antibody (clone 9A11B9) is for research use only and not for use in diagnostic or therapeutic procedures.

S100B / S100 Beta Antibody (clone 9A11B9) - Protein Information

Name S100B {ECO:0000303|PubMed:6487634, ECO:0000312|HGNC:HGNC:10500}

Function

Small zinc- and- and calcium-binding protein that is highly expressed in astrocytes and constitutes one of the most abundant soluble proteins in brain (PubMed:6487634, PubMed:20950652). Weakly binds calcium but binds zinc very tightly-distinct binding sites with different affinities exist for both ions on each monomer (PubMed:6487634, PubMed:20950652). Physiological concentrations of potassium ion antagonize the binding of both divalent cations, especially affecting high-affinity calcium-binding sites (By similarity). Acts as a neurotrophic factor that promotes astrocytosis and axonal proliferation (By similarity). Involved in innervation of thermogenic adipose tissue by acting as an adipocyte-derived neurotrophic factor that promotes sympathetic innervation of adipose tissue (By

similarity). Binds to and initiates the activation of STK38 by releasing autoinhibitory intramolecular interactions within the kinase (By similarity). Interaction with AGER after myocardial infarction may play a role in myocyte apoptosis by activating ERK1/2 and p53/TP53 signaling (By similarity). Could assist ATAD3A cytoplasmic processing, preventing aggregation and favoring mitochondrial localization (PubMed:20351179). May mediate calcium-dependent regulation on many physiological processes by interacting with other proteins, such as TPR-containing proteins, and modulating their activity (PubMed:22399290).

Cellular Location

Cytoplasm. Nucleus. Secreted {ECO:0000250|UniProtKB:P50114} Note=Secretion into the medium is promoted by interaction with isoform CLSTN3beta of CLSTN3. {ECO:0000250|UniProtKB:P50114}

Tissue Location

Although predominant among the water-soluble brain proteins, S100 is also found in a variety of other tissues

Volume

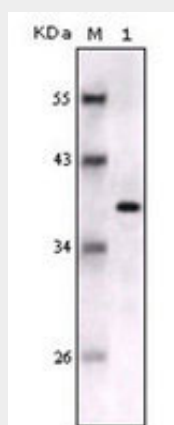
50 µl

S100B / S100 Beta Antibody (clone 9A11B9) - Protocols

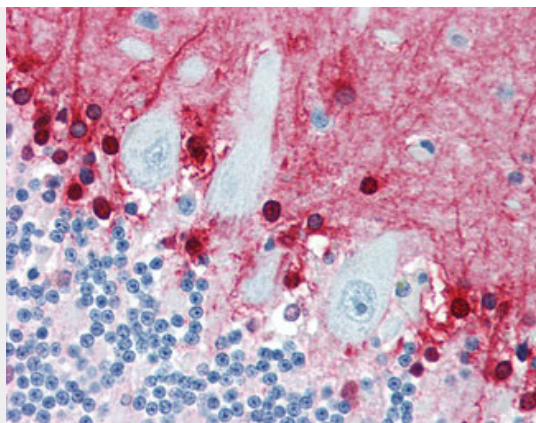
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

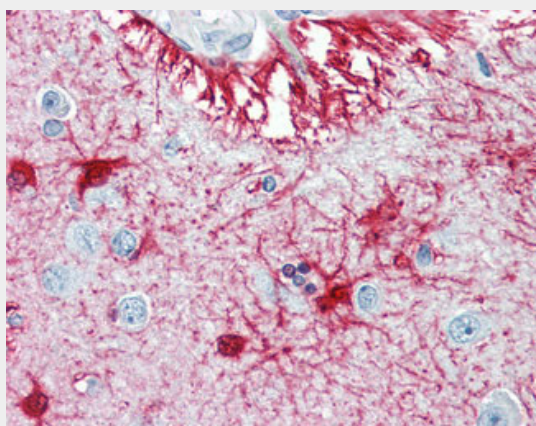
S100B / S100 Beta Antibody (clone 9A11B9) - Images



Western blot using S100B mouse monoclonal antibody against full-length S100B recombinant protein.



Anti-S100B antibody IHC of human brain, cerebellum.



Anti-S100B antibody IHC of human brain, cortex.

S100B / S100 Beta Antibody (clone 9A11B9) - Background

Weakly binds calcium but binds zinc very tightly- distinct binding sites with different affinities exist for both ions on each monomer. Physiological concentrations of potassium ion antagonize the binding of both divalent cations, especially affecting high-affinity calcium-binding sites. Binds to and initiates the activation of STK38 by releasing autoinhibitory intramolecular interactions within the kinase. Interaction with AGER after myocardial infarction may play a role in myocyte apoptosis by activating ERK1/2 and p53/TP53 signaling. Could assist ATAD3A cytoplasmic processing, preventing aggregation and favoring mitochondrial localization. May mediate calcium-dependent regulation on many physiological processes by interacting with other proteins, such as TPR-containing proteins, and modulating their activity.

S100B / S100 Beta Antibody (clone 9A11B9) - References

Allore R.J.,et al.J. Biol. Chem. 265:15537-15543(1990).
Ebert L.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
Hattori M.,et al.Nature 405:311-319(2000).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Jensen R.,et al.J. Neurochem. 45:700-705(1985).