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Anti-S100B Antibody
Mouse Monoclonal Antibody
Catalog # AP53396

Specification

Anti-S100B Antibody - Product Information

Application	**WB**
Primary Accession	P04271
Other Accession	BC041935
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG2b**
Immunogen	**Human S100B synthetic peptide conjugated to KLH.**
Purification	**Affinity purified**
Calculated MW	**10 KDa**

Anti-S100B Antibody - Additional Information

Gene ID 6285

Other Names
NEF; Protein S100 B; Protein S100-B; S 100 calcium binding protein beta chain; S 100 protein beta chain; S-100 protein beta chain; S-100 protein subunit beta; S100; S100 calcium binding protein beta (neural); S100 calcium-binding protein B; S100 protein beta chain; S100B; S100B_HUMAN; S100beta.

Dilution
WB~~1:500

Format
Purified mouse monoclonal antibody in PBS(pH 7.4) containing with 0.09% (W/V) sodium azide and 50% glycerol.

Storage
Store at -20 °C.Stable for 12 months from date of receipt

Anti-S100B Antibody - 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:20950652, PubMed:6487634). Weakly binds calcium but binds zinc very tightly-distinct binding sites with different affinities exist for both ions on each monomer (PubMed:<a href="http://www.uniprot.org/citations/20950652"

target="_blank">20950652, PubMed:6487634). 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

Anti-S100B Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-S100B Antibody - Images

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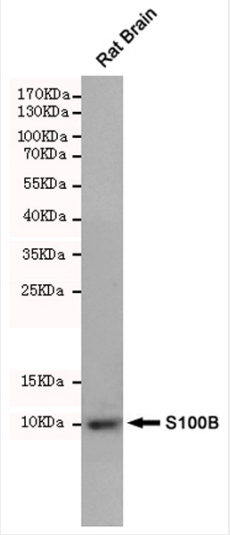

Western blot analysis of extracts from Rat Brain cell lysates using S100B mouse mAb (1:500 diluted).Predicted band size:10kDa.Observed band size:10kDa.

Anti-S100B Antibody - 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