

## S100B Antibody

Rabbit mAb Catalog # AP90251

## **Specification**

## **S100B Antibody - Product Information**

Application WB, IHC, ICC, IP

Primary Accession
Reactivity
Rat
Clonality
Monoclonal

**Other Names** 

S100B; NEF; S100; S100 beta;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 10713 Da

# **S100B Antibody - Additional Information**

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

**S100B** 

Description Despite their relatively small size (8-12

kDa) and uncomplicated architecture, \$100 proteins regulate a variety of cellular processes such as cell growth and motility, cell cycle progression, transcription, and differentiation. To date, 25 members have

been identified, including

S100A1-S100A18, trichohyalin, filaggrin, repetin, S100P, and S100Z, making it the

largest group in the EF-hand, calcium-binding protein family.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline ,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

## **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:<a

href="http://www.uniprot.org/citations/20950652" target="\_blank">20950652</a>, PubMed:<a href="http://www.uniprot.org/citations/6487634" target="\_blank">6487634</a>). 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</a>, PubMed:<a href="http://www.uniprot.org/citations/6487634" target="\_blank">6487634</a>). 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:<a href="http://www.uniprot.org/citations/20351179" target="\_blank">20351179</a>). May mediate calcium-dependent regulation on many physiological processes by interacting with other proteins, such as TPR-containing proteins, and modulating their activity (PubMed:<a href="http://www.uniprot.org/citations/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

### **S100B Antibody - Protocols**

target=" blank">22399290</a>).

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## S100B Antibody - Images



