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S100B/S-100 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP14936c

Specification

S100B/S-100 Antibody (Center) Blocking Peptide - Product Information

Primary Accession P04271

S100B/S-100 Antibody (Center) Blocking Peptide - 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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

S100B/S-100 Antibody (Center) Blocking Peptide - 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:<a href="http://www.uniprot.org/citations/20351179"

target="_blank">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

S100B/S-100 Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

S100B/S-100 Antibody (Center) Blocking Peptide - Images

S100B/S-100 Antibody (Center) Blocking Peptide - Background

The protein encoded by this gene is a member of the S100family of proteins containing 2 EF-hand calcium-binding motifs.S100 proteins are localized in the cytoplasm and/or nucleus of awide range of cells, and involved in the regulation of a number ofcellular processes such as cell cycle progression anddifferentiation. S100 genes include at least 13 members which arelocated as a cluster on chromosome 1q21; however, this gene islocated at 21q22.3. This protein may function in Neurite extension,proliferation of melanoma cells, stimulation of Ca2+ fluxes,inhibition of PKC-mediated phosphorylation, astrocytosis and axonalproliferation, and inhibition of microtubule assembly. Chromosomalrearrangements and altered expression of this gene have beenimplicated in several neurological, neoplastic, and other types ofdiseases, including Alzheimer's disease, Down's syndrome, epilepsy,amyotrophic lateral sclerosis, melanoma, and type I diabetes.

S100B/S-100 Antibody (Center) Blocking Peptide - References

Sahoo, N., et al. FEBS Lett. 584(18):3896-3900(2010)Lin, J., et al. J. Biol. Chem. 285(35):27487-27498(2010)van Dieck, J., et al. FEBS Lett. 584(15):3269-3274(2010)Egberts, F., et al. Anticancer Res. 30(5):1799-1805(2010)Boutsikou, T., et al. Mediators Inflamm. 2010, 790605 (2010) :