

ARG54640
anti-S100 antibody [B32.1]Package: 100 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [B32.1] recognizes S100
Tested Reactivity	Hu, Ms, Rat, Bov
Tested Application	ICC/IF, IHC-P
Specificity	This antibody reacts with alpha and beta subunits of human S-100 protein (21-24 kD).
Host	Mouse
Clonality	Monoclonal
Clone	B32.1
Isotype	IgG2a
Target Name	S100
Species	Bovine
Immunogen	bovine brain S100 protein
Conjugation	Un-conjugated
Alternate Names	S-100 protein beta chain; NEF; S100; Protein S100-B; S100 calcium-binding protein B; S100beta; S-100 protein subunit beta; S100-B

Application Instructions

Application table	Application	Dilution
	ICC/IF	Assay-dependent
	IHC-P	Assay-dependent
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Melanoma	

Properties

Form	Liquid
Purification	Purified Antibody
Buffer	1X PBS and 0.1% Sodium azide
Preservative	0.1% Sodium azide
Concentration	0.2 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation**Gene Symbol**

S100B

Gene Full Name

S100 calcium binding protein B

Background

The protein encoded by this gene is a member of the S100 family of proteins containing 2 EF-hand calcium-binding motifs. S100 proteins are localized in the cytoplasm and/or nucleus of a wide range of cells, and involved in the regulation of a number of cellular processes such as cell cycle progression and differentiation. S100 genes include at least 13 members which are located as a cluster on chromosome 1q21; however, this gene is located 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 axonal proliferation, and inhibition of microtubule assembly. Chromosomal rearrangements and altered expression of this gene have been implicated in several neurological, neoplastic, and other types of diseases, including Alzheimer's disease, Down's syndrome, epilepsy, amyotrophic lateral sclerosis, melanoma, and type I diabetes. [provided by RefSeq, Jul 2008]

Function

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 (By similarity). [UniProt]

Research Area

Cell Biology and Cellular Response antibody; Developmental Biology antibody; Gene Regulation antibody

Calculated Mw

11 kDa