

ARG57728
anti-S100 beta antibody [4C4.9]Package: 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [4C4.9] recognizes S100 beta
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Specificity	This antibody is specific against an epitope located on the beta-chain (i.e. in S100A and S100B) but not on the alpha-chain of S-100 (i.e. in S100A and S100A0).
Host	Mouse
Clonality	Monoclonal
Clone	4C4.9
Isotype	IgG2a, kappa
Target Name	S100 beta
Species	Bovine
Immunogen	Purified 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	2 - 5 µg/ml
	IHC-P	2 - 5 µg/ml
	WB	1 - 2 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 11 kDa	

Properties

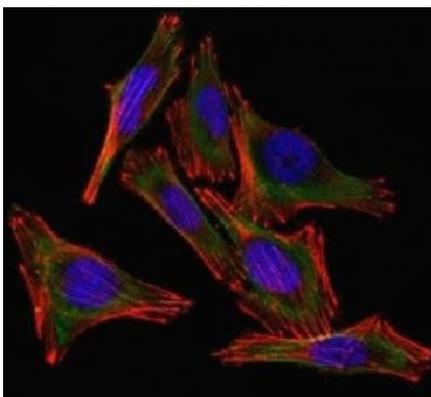
Form	Liquid
Purification	Purified.
Buffer	PBS, 0.05% Sodium azide and 0.1 mg/ml BSA.
Preservative	0.05% Sodium azide
Stabilizer	0.1 mg/ml BSA

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

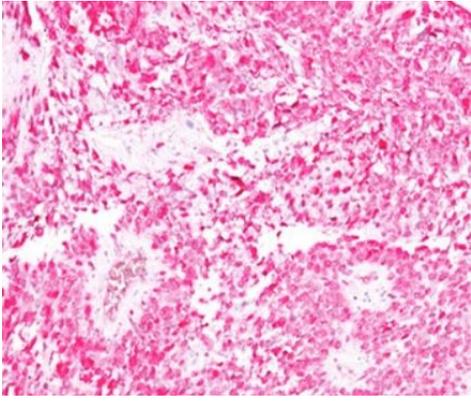
Gene Symbol	S100B
Gene Full Name	S100 calcium binding protein B
Background	The protein encoded by this gene is a member of the S100 family of proteins containing 2 EF-hand calcium-binding motifs. S100 proteins are localized in the cytoplasm and/or nucleus of a wide range of cells, and involved in the 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 Ca ²⁺ 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. [UniProt]
Calculated Mw	11 kDa

Images



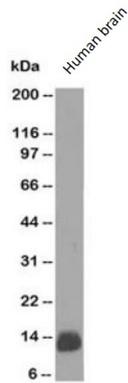
ARG57728 anti-S100 beta antibody [4C4.9] ICC/IF image

Immunofluorescence: A2058 cells stained with ARG57728 anti-S100 beta antibody [4C4.9] (green).



ARG57728 anti-S100 beta antibody [4C4.9] IHC-P image

Immunohistochemistry: Paraffin-embedded Human melanoma stained with ARG57728 anti-S100 beta antibody [4C4.9].



ARG57728 anti-S100 beta antibody [4C4.9] WB image

Western blot: Human brain lysate stained with ARG57728 anti-S100 beta antibody [4C4.9].