



# S100 $\beta$ Monoclonal Antibody

Catalog No	BYmab-01194
Isotype	IgG
Reactivity	Human;Rat;Mouse
Applications	WB
Gene Name	S100B
Protein Name	Protein S100-B (S-100 protein beta chain) (S-100 protein subunit beta) (S100 calcium-binding protein B)
Immunogen	Recombinant Protein of S100 $\beta$
Specificity	The antibody detects endogenous S100 $\beta$ protein
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	$\geq 90\%$
Storage Stability	-20°C/1 year
Synonyms	Protein S100-B (S-100 protein beta chain;S-100 protein subunit beta;S100 calcium-binding protein B)
Observed Band	11kD
Cell Pathway	Cytoplasm . Nucleus .
Tissue Specificity	Although predominant among the water-soluble brain proteins, S100 is also found in a variety of other tissues.
Function	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.,miscellaneous:In addition to metal-ion binding, this protein is involved with the regulation of protein phosphorylation in brain tissue.,similarity:Belongs to the S-101 family.,similarity:Contains 2 EF-hand domains.,subunit:Dimer of either two alpha chains, or two beta chains, or one alpha and one beta chain. The S100B dimer binds two molecules of STK38 (By similarity). The S100B dimer interacts with two molecules of CAPZA1.,tissue specificity:Although predominant

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## 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<sup>2+</sup> 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

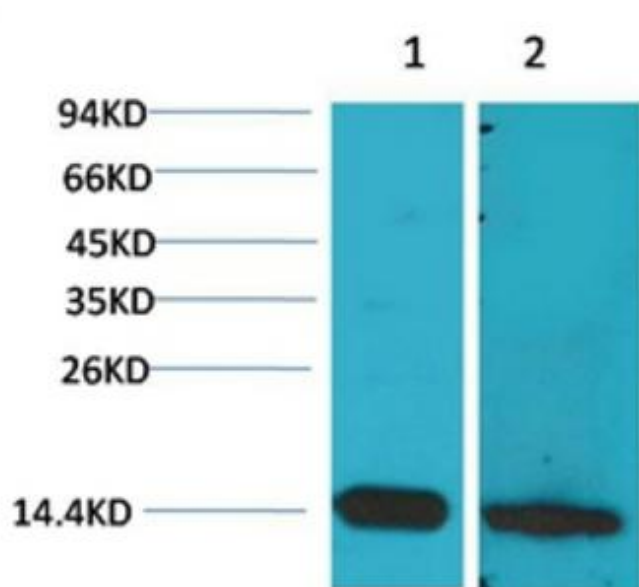
## matters needing attention

Avoid repeated freezing and thawing!

## Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images



Western Blot analysis of various cells using S100  $\beta$  Monoclonal Antibody

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