



# S-100 $\alpha$ Monoclonal Antibody

<b>Catalog No</b>	BYab-02938
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	S100A1
<b>Protein Name</b>	Protein S100-A1
<b>Immunogen</b>	Purified recombinant fragment of S-100 $\alpha$ expressed in E. Coli.
<b>Specificity</b>	S-100 $\alpha$ Monoclonal Antibody detects endogenous levels of S-100 $\alpha$ protein.
<b>Formulation</b>	Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.
<b>Source</b>	Monoclonal, Mouse
<b>Purification</b>	Affinity purification
<b>Dilution</b>	WB: 1/500 - 1/2000. IHC: 1/200 - 1/1000. ELISA: 1/10000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	$\geq 90\%$
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	S100A1; S100A; Protein S100-A1; S-100 protein alpha chain; S-100 protein subunit alpha; S100 calcium-binding protein A1
<b>Observed Band</b>	
<b>Cell Pathway</b>	Cytoplasm . Sarcoplasmic reticulum . Mitochondrion .
<b>Tissue Specificity</b>	Highly prevalent in heart (PubMed:12804600, PubMed:1384693). Also found in lesser quantities in skeletal muscle and brain (PubMed:1384693).
<b>Function</b>	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.,similarity:Belongs to the S-100 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.,tissue specificity:Highly prevalent in heart. Also found in lesser quantities in skeletal muscle and brain.,
<b>Background</b>	S100 calcium binding protein A1(S100A1) Homo sapiens 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

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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. This protein may function in stimulation of Ca<sup>2+</sup>-induced Ca<sup>2+</sup> release, inhibition of microtubule assembly, and inhibition of protein kinase C-mediated phosphorylation. Reduced expression of this protein has been implicated in cardiomyopathies. [provided by RefSeq, Jul 2008],

**matters needing attention**

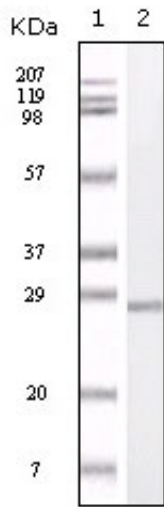
Avoid repeated freezing and thawing!

**Usage suggestions**

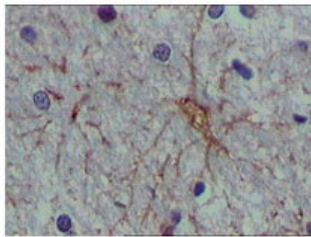
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



## Products Images



Western Blot analysis using S-100  $\alpha$  Monoclonal Antibody against truncated S-100  $\alpha$  recombinant protein.



Immunohistochemistry analysis of paraffin-embedded human brain tissue (A), lymphoid follicles tissue (B) and interbrain tissue (C), showing cytoplasmic localization with DAB staining using S-100  $\alpha$  Monoclonal Antibody.

