



S-100 α Monoclonal Antibody

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



Background

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 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 Ca²⁺-induced Ca²⁺ 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],

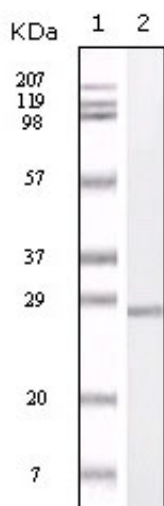
matters needing attention

Avoid repeated freezing and thawing!

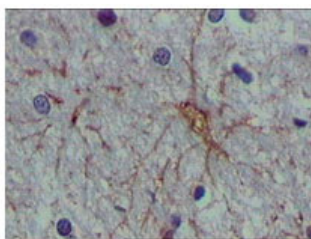
Usage suggestions

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

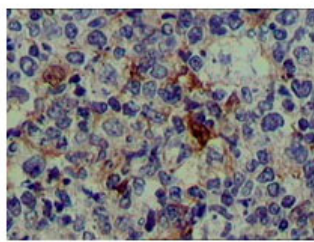
Products Images



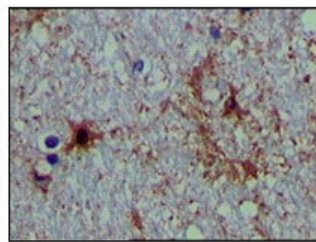
Western Blot analysis using S-100 α Monoclonal Antibody against truncated S-100 α recombinant protein.



A



B



C

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 α Monoclonal Antibody.