Best Tools for immunology Research

S-100 α Monoclonal Antibody

Catalog No :	YM0571
Reactivity :	Human
Applications :	WB;IHC;IF;ELISA
Target :	S-100 α
Gene Name :	S100A1
Protein Name :	Protein S100-A1
Human Gene Id :	6271
Human Swiss Prot No :	P23297
Mouse Swiss Prot No :	P56565
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 :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:500 - 1:2000. IHC 1:200 - 1:1000. ELISA: 1:10000.. IF 1:50-200
Purification :	Affinity purification
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	11kD
P References :	1. Koenig A, Wojcieszyn J, Weeks BR, et al. Vet Pathol. 2001;38(4):427-35. 2. Hoyaux D, Decaestecker C, Heizmann CW, et al. Brain Res. 2000;867(1-2):280-8. 3. Pingerelli PL, Mizukami H, Wagner

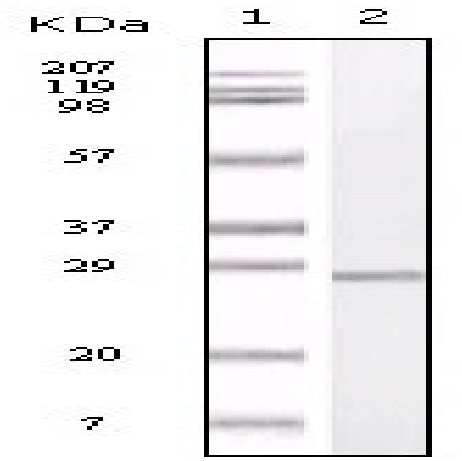
Background : S100 calcium binding protein A1(S100A1) Homo sapiens The protein encoded by this gene is a member of the S100 family of proteins containing 2 EF-hand calcium-binding motifs. S100 proteins are localized in the cytoplasm and/or nucleus of a wide range of cells, and involved in the regulation 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],

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.,

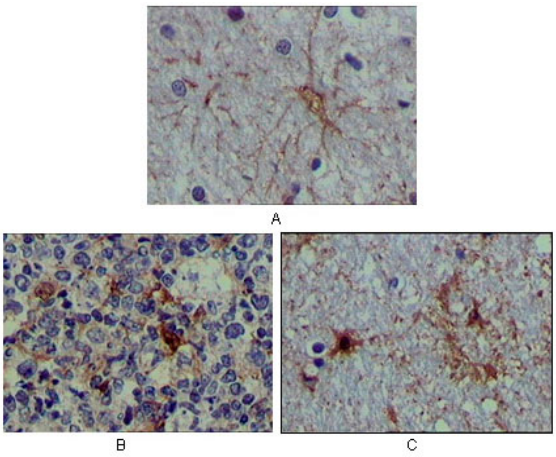
Subcellular Location : Cytoplasm . Sarcoplasmic reticulum . Mitochondrion .

Expression : Highly prevalent in heart (PubMed:12804600, PubMed:1384693). Also found in lesser quantities in skeletal muscle and brain (PubMed:1384693).

Products Images



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