

**S-100  $\alpha$  Monoclonal Antibody**

<b>Catalog No :</b>	YM0571
<b>Reactivity :</b>	Human
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	S-100 $\alpha$
<b>Gene Name :</b>	S100A1
<b>Protein Name :</b>	Protein S100-A1
<b>Human Gene Id :</b>	6271
<b>Human Swiss Prot No :</b>	P23297
<b>Mouse Swiss Prot No :</b>	P56565
<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>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Monoclonal, Mouse
<b>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:200 - 1:1000. ELISA: 1:10000.. IF 1:50-200
<b>Purification :</b>	Affinity purification
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Molecularweight :</b>	11kD
<b>P References :</b>	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 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],

**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).

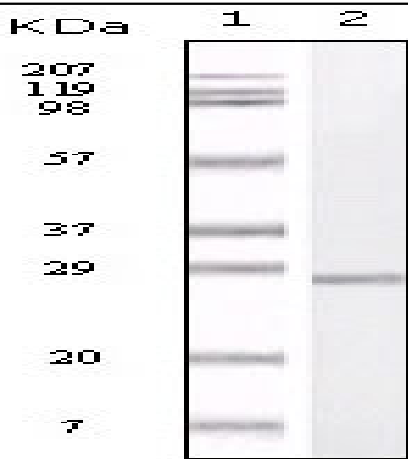
**Sort :** 14675

**No4 :** 1

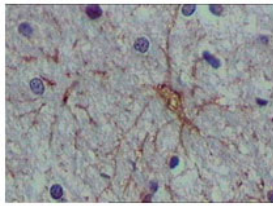
**Host :** Mouse

**Modifications :** Unmodified

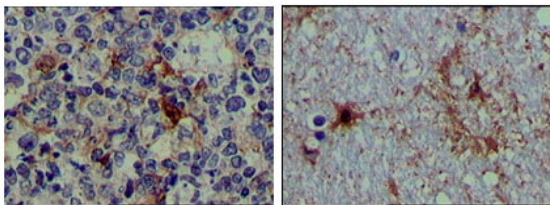
## Products Images



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.



B

C