

S-100 α Monoclonal Antibody

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| 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.,

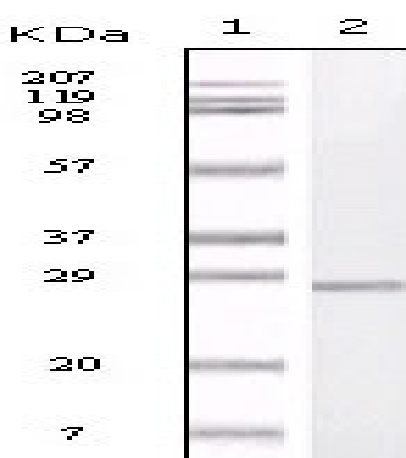
Subcellular Location : Cytoplasm . Sarcoplasmic reticulum . Mitochondrion .

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

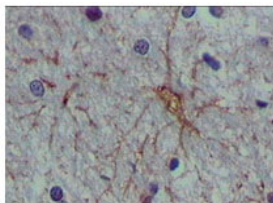
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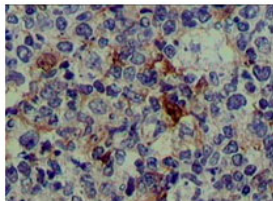
Products Images



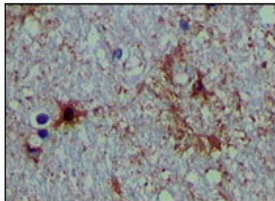
Western Blot analysis using S-100 α Monoclonal Antibody against truncated S-100 α recombinant protein.



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.