



# S100 Monoclonal Antibody

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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| <b>Catalog No</b>                  | YP-mAb-03005                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Applications</b>                | WB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Gene Name</b>                   | S100A1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Immunogen</b>                   | Recombinant Protein of S100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Specificity</b>                 | The antibody detects endogenous S100 protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Source</b>                      | Monoclonal, Mouse,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Purification</b>                | The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Dilution</b>                    | WB 1:500-1:2000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Synonyms</b>                    | Protein S100 A1;S 100 protein alpha chain;S 100 protein subunit alpha;S100;S100 alpha;S100A;S100A1;Protein S100-A1 (S-100 protein alpha chain) (S-100 protein subunit alpha) (S100 calcium-binding protein A1);Protein S100-A1 (S-100 protein alpha chain;S-100 protein subunit alpha;S100 calcium-binding protein A1)                                                                                                                                                                                                                                                                              |
| <b>Observed Band</b>               | 15kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Calculated Molecular Weight</b> | 15kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <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., |



## 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],

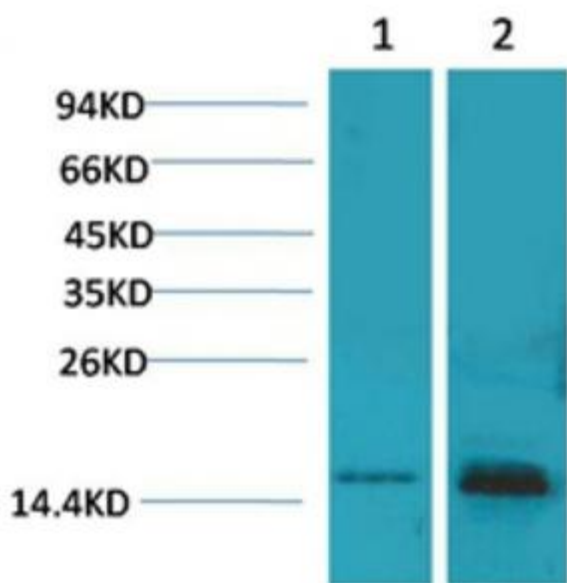
## matters needing attention

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 of various cells using S100 Monoclonal Antibody