

# Anti-S100 S100A1 Rabbit Monoclonal Antibody

Catalog # ABO13553

## Product Information

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| <b>Application</b>       | WB, IHC, IP, FC                                                                                                                           |
| <b>Primary Accession</b> | <a href="#">P23297</a>                                                                                                                    |
| <b>Host</b>              | Rabbit                                                                                                                                    |
| <b>Isotype</b>           | Rabbit IgG                                                                                                                                |
| <b>Reactivity</b>        | Human, Mouse                                                                                                                              |
| <b>Clonality</b>         | Monoclonal                                                                                                                                |
| <b>Format</b>            | Liquid                                                                                                                                    |
| <b>Description</b>       | Anti-S100 S100A1 Rabbit Monoclonal Antibody . Tested in WB, IHC, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse. |

## Additional Information

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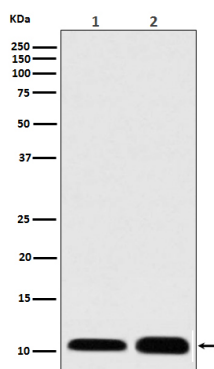
|                                 |                                                                                                                                            |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene ID</b>                  | 6271                                                                                                                                       |
| <b>Other Names</b>              | Protein S100-A1, S-100 protein alpha chain, S-100 protein subunit alpha, S100 calcium-binding protein A1, S100A1, S100A                    |
| <b>Calculated MW</b>            | 10546                                                                                                                                      |
| <b>Application Details</b>      | WB 1:500-1:1000<br>IHC 1:100-1:500<br>IP 1:50<br>FC 1:50                                                                                   |
| <b>Subcellular Localization</b> | Cytoplasm.                                                                                                                                 |
| <b>Tissue Specificity</b>       | Highly prevalent in heart. Also found in lesser quantities in skeletal muscle and brain.                                                   |
| <b>Source</b>                   | Eukaryota                                                                                                                                  |
| <b>Contents</b>                 | Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.                        |
| <b>Clone Names</b>              | Clone: ABCF-19                                                                                                                             |
| <b>Immunogen</b>                | A synthesized peptide derived from human S100                                                                                              |
| <b>Purification</b>             | Affinity-chromatography                                                                                                                    |
| <b>Storage</b>                  | Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles. |

## Protein Information

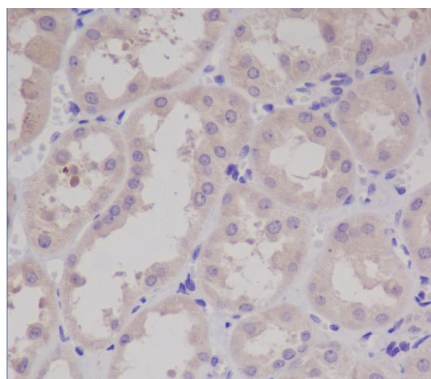
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| <b>Name</b>              | S100A1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Synonyms</b>          | S100A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Function</b>          | Small calcium binding protein that plays important roles in several biological processes such as Ca(2+) homeostasis, chondrocyte biology and cardiomyocyte regulation (PubMed: <a href="#">12804600</a> ). In response to an increase in intracellular Ca(2+) levels, binds calcium which triggers conformational changes (PubMed: <a href="#">23351007</a> ). These changes allow interactions with specific target proteins and modulate their activity (PubMed: <a href="#">22399290</a> ). Regulates a network in cardiomyocytes controlling sarcoplasmic reticulum Ca(2+) cycling and mitochondrial function through interaction with the ryanodine receptors RYR1 and RYR2, sarcoplasmic reticulum Ca(2+)-ATPase/ATP2A2 and mitochondrial F1-ATPase (PubMed: <a href="#">12804600</a> ). Facilitates diastolic Ca(2+) dissociation and myofilament mechanics in order to improve relaxation during diastole (PubMed: <a href="#">11717446</a> ). |
| <b>Cellular Location</b> | Cytoplasm. Sarcoplasmic reticulum. Mitochondrion<br>{ECO:0000250 UniProtKB:P56565}                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Tissue Location</b>   | Highly prevalent in heart (PubMed:12804600, PubMed:1384693). Also found in lesser quantities in skeletal muscle and brain (PubMed:1384693).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

## Images



Western blot analysis of S100 expression in (1) Human skeletal muscle lysate; (2) RAW 264.7 cell lysate.



Immunohistochemical analysis of paraffin-embedded human kidney, using S100 Antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.