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Anti-S100 S100A1 Rabbit Monoclonal Antibody

Catalog # ABO13553

Specification

Anti-S100 S100A1 Rabbit Monoclonal Antibody - Product Information

Application	**WB, IHC, IP, FC**
Primary Accession	P23297
Host	**Rabbit**
Isotype	**Rabbit IgG**
Reactivity	**Human, Mouse**
Clonality	**Monoclonal**
Format	**Liquid**

Description
Anti-S100 S100A1 Rabbit Monoclonal Antibody . Tested in WB, IHC, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse.

Anti-S100 S100A1 Rabbit Monoclonal Antibody - Additional Information

Gene ID 6271

Other Names
Protein S100-A1, S-100 protein alpha chain, S-100 protein subunit alpha, S100 calcium-binding protein A1, S100A1, S100A

Calculated MW
10546 MW KDa

Application Details
WB 1:500-1:1000
IHC 1:100-1:500
IP 1:50
FC 1:50

Subcellular Localization
Cytoplasm.

Tissue Specificity
Highly prevalent in heart. Also found in lesser quantities in skeletal muscle and brain.

Contents
Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen
A synthesized peptide derived from human S100

Purification
Affinity-chromatography

Storage	**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.

Anti-S100 S100A1 Rabbit Monoclonal Antibody - Protein Information

Name S100A1

Synonyms S100A

Function
Small calcium binding protein that plays important roles in several biological processes such as Ca(2+) homeostasis, chondrocyte biology and cardiomyocyte regulation (PubMed:12804600). In response to an increase in intracellular Ca(2+) levels, binds calcium which triggers conformational changes (PubMed:23351007). These changes allow interactions with specific target proteins and modulate their activity (PubMed:22399290). 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:12804600). Facilitates diastolic Ca(2+) dissociation and myofilament mechanics in order to improve relaxation during diastole (PubMed:11717446).

Cellular Location
Cytoplasm. Sarcoplasmic reticulum. Mitochondrion {ECO:0000250|UniProtKB:P56565}

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

Anti-S100 S100A1 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-S100 S100A1 Rabbit Monoclonal Antibody - Images

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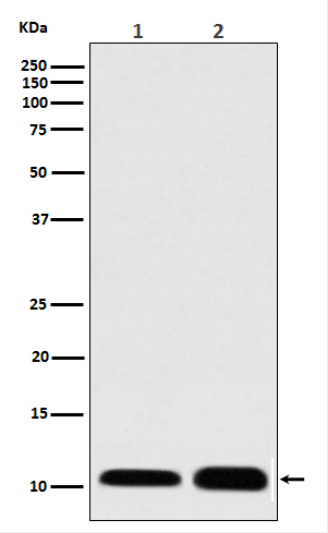
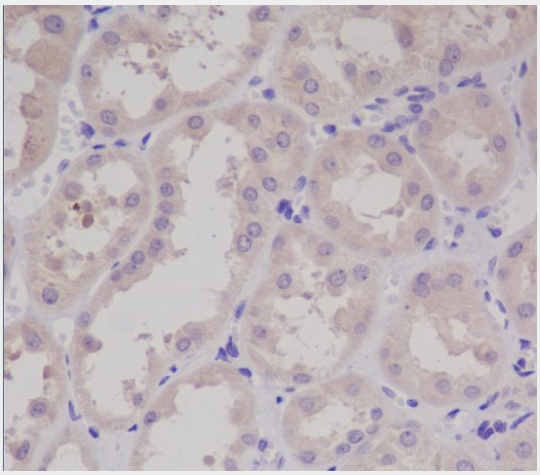


Western blot analysis of S100 expression in (1) Human skeletal muscle lysate; (2) RAW 264.7 cell lysate.



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