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S-100 α Polyclonal Antibody
Catalog # AP72380

Specification

S-100 α Polyclonal Antibody - Product Information

Application	**WB, IHC-P, IF**
Primary Accession	P23297
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**

S-100 α Polyclonal Antibody - Additional Information

Gene ID 6271

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

Dilution
WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
IHC-P~~N/A
IF~~1:50~200

Format
Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions
-20℃

S-100 α Polyclonal 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:<a

href="http://www.uniprot.org/citations/12804600" target="_blank">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}

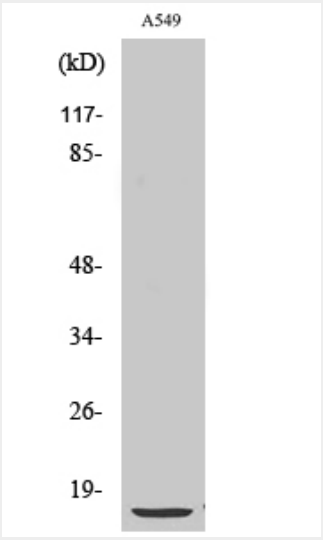
Tissue Location
Highly prevalent in heart (PubMed:12804600, PubMed:1384693). Also found in lesser quantities in skeletal muscle and brain (PubMed:1384693).

S-100 α Polyclonal 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

S-100 α Polyclonal Antibody - Images



Western Blot analysis of various cells using S-100 α Polyclonal Antibody

S-100 α Polyclonal Antibody - Background

Probably acts as a Ca(2+) signal transducer (PubMed:22399290). In response to an increase in intracellular Ca(2+) levels, binds calcium which triggers a conformational change (PubMed:23351007). This conformational change allows interaction of S1001A with specific target proteins, such as TPR- containing proteins, and the modulation of their activity (PubMed:22399290).