

S100
Mouse Monoclonal Antibody (Mab)
Catalog # APA139

Specification

S100 - Product Information

Application	IHC
Primary Accession	P23297
Host	Mouse
Clonality	Monoclonal
Calculated MW	10546 Da

S100 - Additional Information

Gene ID	6271
Gene Name	S100A1

Other Names

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

Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	S100 is for research use only and not for use in diagnostic or therapeutic procedures.

S100 - 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,

Cellular Location	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).
Tissue Location	Cytoplasm. Sarcoplasmic reticulum. Mitochondrion {ECO:0000250 UniProtKB:P56565} Highly prevalent in heart (PubMed: 12804600 , PubMed: 1384693). Also found in lesser quantities in skeletal muscle and brain (PubMed: 1384693).

S100 - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

S100 - Images