

S-100 Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10746**Specification**

S-100 Antibody - Product Information

Application	WB
Primary Accession	P23297
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	10546

S-100 Antibody - Additional Information**Gene ID** 6271

Positive Control	Jurkat, Rat, 3T3 cell lysates
Application & Usage	The antibody can be used for Western blotting (1-4 µg/ml).

Other Names
S100A1; S100; S100-alpha; S100A

Target/Specificity
S-100

Antibody Form
Liquid

Appearance
Colorless liquid

Formulation
100 µg (0.5 mg/ml) affinity purified rabbit anti-S-100 polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 5 mM EDTA and 0.01% thimerosal.

Handling
The antibody solution should be gently mixed before use.

Reconstitution & Storage
-20 °C

Background Descriptions

Precautions
S-100 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

S-100 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).

S-100 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 Cytometry](#)
- [Cell Culture](#)

S-100 Antibody - Images

S-100 Antibody - Background

S-100 protein is expressed from the beginning of lipidogenesis and may act as a factor regulating lipid storage and body fat formation. It can be used as a reliable biochemical marker of human fat cell differentiation and for distinguishing them from the mesenchymal and the fibroblast cells in the human embryonal subcutis.