

**S-100 Blocking Peptide**  
**Catalog # PBV10470b****Specification**

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**S-100 Blocking Peptide - Product Information**

Primary Accession	<a href="#">P23297</a>
Gene ID	<b>6271</b>
Calculated MW	<b>10546</b>

**S-100 Blocking Peptide - Additional Information****Gene ID** 6271**Application & Usage**

**The peptide is used for blocking the antibody activity of S100. It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for 30-60 minutes at 37°C.**

**Other Names**

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

**Target/Specificity**

S-100

**Formulation**

50 µg (0.5 mg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA and 0.02% thimerosal.

**Reconstitution & Storage**

-20 °C

**Background Descriptions****Precautions**

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

**S-100 Blocking Peptide - 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:<a href="http://www.uniprot.org/citations/12804600" target="\_blank">12804600</a>). In response to an increase in intracellular Ca(2+) levels, binds calcium which triggers conformational changes (PubMed:<a href="http://www.uniprot.org/citations/23351007" target="\_blank">23351007</a>). These changes allow interactions with specific target proteins and modulate their activity (PubMed:<a href="http://www.uniprot.org/citations/22399290" target="\_blank">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="http://www.uniprot.org/citations/12804600" target="\_blank">12804600</a>). Facilitates diastolic Ca(2+) dissociation and myofilament mechanics in order to improve relaxation during diastole (PubMed:<a href="http://www.uniprot.org/citations/11717446" target="\_blank">11717446</a>).

**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 Blocking Peptide - 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 Blocking Peptide - Images**