

# Recombinant Mouse S100 Calcium Binding Protein A1, His-tagged

Cat. No. S100a1-3549M Lot. No. (See product label)

## SPECIFICATION

### Product Overview

Recombinant mouse S100A1 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

### Species

Mouse

### Source

E.coli

### Description

S100 calcium binding protein A1, also known as S100A, is a member of the S100 family of proteins containing 2 EF-hand calcium-binding motifs. S100 proteins are localized in the cytoplasm and nucleus of a wide range of cells, and involved in the regulation of a number of cellular processes such as cell cycle progression and differentiation. S100A1 is expressed by striated muscle, endothelium and chondrocytes. Intracellularly, S100A1 regulates cytosolic Ca levels, and is part of the Hsp70/Hsp90 mutlichaperone complex that protects against protein denaturation.

### Purity

> 90% by SDS - PAGE

### Formulation

Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 30% glycerol, 0.1M NaCl.

### Molecular Weight

12.6 kDa (114aa), confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by Bradford assay)

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**Sequences of amino acids** MGSSHHHHHH SSGLVPRGSH MGSELESAME TLINVFHAHS GKEGDKYKLS  
 KKELKDLLQT ELSGFLDVQK DADAVDKVMK ELDENGDGEV DFKEYVVLVA  
 ALTVACNNFF WETS

**Storage** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

## GENE INFORMATION

**Gene Name** [S100a1](#) [S100 calcium binding protein A1 \[ Mus musculus \]](#)

**Synonyms** AI266795; OTTMUSP00000024891; OTTMUSP00000024892; protein S100-A1; S100; S100 alpha; S100 calcium binding protein; S100 calcium binding protein A1; S-100 protein alpha chain; S-100 protein subunit alpha; S100 protein, alpha polypeptide; S100A; S100a; S100a1; S100-alpha

**Gene ID** [20193](#)

**mRNA Refseq** [NM\\_011309](#)

**Protein Refseq** [NP\\_035439](#)

**Chromosome Location** 3 F1-F2; 3 43.6 cM

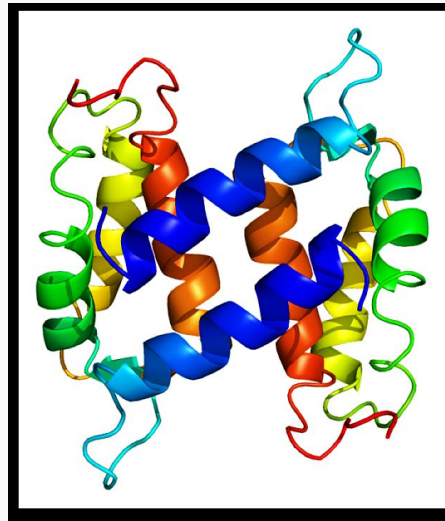
**Function** ATPase binding; calcium ion binding; identical protein binding; metal ion binding; protein binding; protein homodimerization activity; S100 alpha binding; S100 beta binding

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