

Datasheet for ABIN2018336
S100A1 Protein (AA 1-94) (His tag)



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Overview

Quantity:	50 µg
Target:	S100A1
Protein Characteristics:	AA 1-94
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This S100A1 protein is labelled with His tag.

Product Details

Characteristics:	AA 1-94, expressed with an N terminal 6 His tag.
Purity:	> 95 % as analyzed by SDS-PAGE and HPLC.
Endotoxin Level:	< 1 EU/µg, determined by LAL method.

Target Details

Target:	S100A1
Alternative Name:	S100 Calcium-Binding Protein A1 (S100A1) (S100A1 Products)
Background:	S100 calcium-binding protein A1 (S100A1) is a small calcium binding protein with EF-hand structures and belongs to the S100 family. S100 proteins include at least 25 members which are located as a cluster on human chromosome 1q21. S100A1 is found in the heart, skeletal muscle, brain, and kidney. S100A1 mainly resides on the sarcoplasmic reticulum, mitochondria and myofilaments. S100A1 may function in stimulation of Ca ²⁺ -induced Ca ²⁺ release,

Target Details

inhibition of microtubule assembly, and inhibition of protein kinase C-mediated phosphorylation. Reduced expression of this protein has been implicated in cardiomyopathies. Recombinant S100 calcium-binding protein A1 (S100A1) with His tag produced in E. coli is a single chain containing 101 amino acids with molecular mass of 11.5 kDa analyzed by reducing SDS-PAGE.

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

Molecular Weight: 11.5 kDa, observed by reducing SDS-PAGE.

NCBI Accession: [NP_006262](#)

Pathways: [Regulation of Muscle Cell Differentiation](#), [Toll-Like Receptors Cascades](#), [S100 Proteins](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Reconstituted in ddH₂O at 200 µg/mL.

Buffer: Lyophilized after extensive dialysis against 20 mM Tris-HCl, 0.1 mM EDTA, pH 7.0.

Storage: -80 °C

Storage Comment: Lyophilized recombinant S100 calcium-binding protein A1 (S100A1) remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, S100A1 should be stable up to 2 week at 4 °C or up to 3 months at -20 °C.

Expiry Date: 6 months