

Recombinant Human S100A1, His-tagged

Cat. No. S100A1-3718H Lot. No. (See product label)

SPECIFICATION

Product Overview Total 103 AA. MW: 11.66 kDa (calculated). N-Terminal His-tag, 10 extra AA (highlighted).

Species Human

Source E.coli

Description S100 calcium-binding protein A1, also known as S100A1, is a protein which in humans is encoded by the S100A1 gene. The protein encoded by this gene is a member of the S100 family of proteins containing 2 EF-hand calcium-binding motifs. 100 proteins are localized in the cytoplasm and/or 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. S100 genes include at least 13 members which are located as a cluster on chromosome 1q21. This protein may function in stimulation of Ca²⁺-induced Ca²⁺ release, inhibition of microtubule assembly, and inhibition of protein kinase C-mediated phosphorylation. Reduced expression of this protein has been implicated in cardiomyopathies.

Form Filtered (0,4 µm) and lyophilized in 0.5 mg/mL in 20mM TRIS, 50mM NaCl, pH 7.5.

Reconstitution Add deionized water to prepare a working stock solution of approximately 0.5 mg/mL and let the lyophilized pellet dissolve completely. Product is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.

Applications Western blotting

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Quality Control Test	BCA to determine quantity of the protein; SDS PAGE to determine purity of the protein
Sequences of amino acids	MKHHHHHHAS GSELETAMET LINVFHAHSG KEGDKYKLSK KELKELLQTE LSGFLDAQKD VDAVDKVMKE LDENGDGEVD FQEYVVLVAA LTVACNNFFW ENS
Storage	Store lyophilized protein at -20°C. Lyophilized protein remains stable until the expiry date when stored at -20°C. Aliquot reconstituted protein to avoid repeated freezing/thawing cycles and store at -80°C for long term storage. Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after one week at 4°C.

GENE INFORMATION

Gene Name	S100A1 S100 calcium binding protein A1 [Homo sapiens]
Official Symbol	S100A1
Synonyms	S100A1; S100 calcium binding protein A1; S100; S100A; S100-alpha; protein S100-A1; S100 alpha; OTTHUMP00000035100; S-100 protein alpha chain; S-100 protein subunit alpha; S100 calcium-binding protein A1; S100 protein, alpha polypeptide; Protein S100-A1
Gene ID	6271
mRNA Refseq	NM_006271
Protein Refseq	NP_006262
MIM	176940

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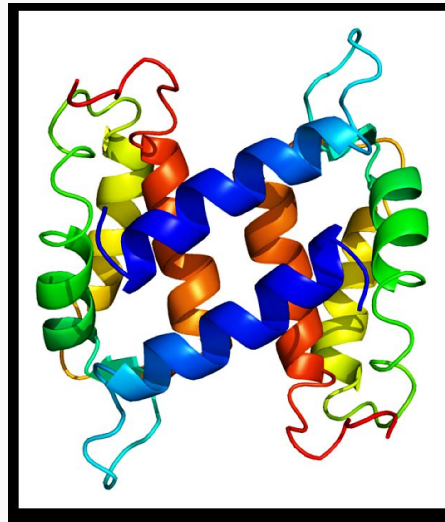
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UniProt ID P23297

**Chromosome
Location** 1q21

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

**ProteinS100A1 PDB
1k2h**



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