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

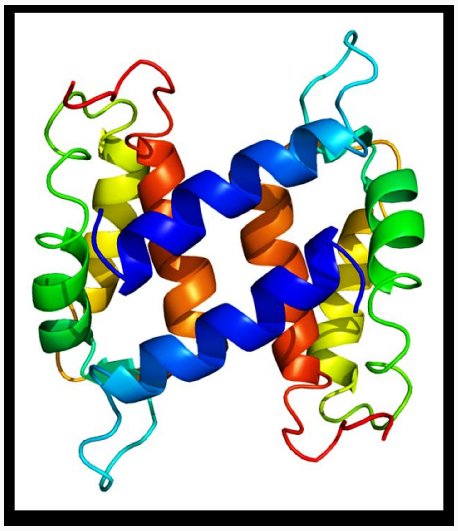
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Quality Control Test	BCA to determine quantity of the protein; SDS PAGE to determine purity of the protein
Sequences of amino acids	MKHHHHHHAS GSELETAMET LINVFHAHSG KEGDKYKLSK KELKELLQTE LSGFLDAQKD VDAVDKVMKE LDENGDGEVD FQEYVVLVAA LTVACNNFFW ENS
Storage	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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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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