

[Go to Product page](#)

## Datasheet for ABIN7317644 **S100A10 Protein (His tag)**

### Overview

Quantity:	100 µg
Target:	S100A10
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This S100A10 protein is labelled with His tag.

### Product Details

Purpose:	Recombinant Human S100A10 Protein (His Tag)
Sequence:	Pro 2-Lys 97
Characteristics:	A DNA sequence encoding the human S100A10 (NP_002957.1) (Pro 2-Lys 97) was expressed, with a polyhistidine tag at the N-terminus.
Purity:	> 95 % as determined by reducing SDS-PAGE.

### Target Details

Target:	S100A10
Alternative Name:	S100A10 ( <a href="#">S100A10 Products</a> )
Background:	Background: S100 protein is a family of low molecular weight protein found in vertebrates characterized by two EF-hand calcium-binding motifs. There are at least 21 different S100 proteins, and the name is derived from the fact that the protein is 100% soluble in ammonium sulfate at neutral pH. Most S100 proteins are disulfide-linked homodimer, and is normally

## Target Details

present in cells derived from the neural crest, chondrocytes, macrophages, dendritic cells, etc. S100 proteins have been implicated in a variety of intracellular and extracellular functions. They are involved in regulation of protein phosphorylation, transcription factors, the dynamics of cytoskeleton constituents, enzyme activities, cell growth and differentiation, and the inflammatory response. Protein S100-A10, also known as Calpactin I light chain, Cellular ligand of annexin II, S100 calcium-binding protein A10, p10 protein, p11, ANX2LG and S100A10, is a member of the S100 family of small, dimeric EF hand-type  $\text{Ca}^{2+}$ -binding proteins that generally modulate cellular target proteins in response to intracellular  $\text{Ca}^{2+}$  signals. In contrast to all other S100 proteins, S100A10 is  $\text{Ca}^{2+}$  insensitive because of amino acid replacements in its  $\text{Ca}^{2+}$ -binding loops that lock the protein in a permanently active state. S100A10 forms a heterotetramer with annexin IIH and promotes carcinoma invasion and metastasis by plasminogen activation. S100A10 and annexin II contribute to the aggressive characteristics of anaplastic carcinoma, while playing a constitutive role in papillary carcinoma. S100A10 induces the dimerization of ANXA2 / p36, it may function as a regulator of protein phosphorylation in that the ANXA2 monomer is the preferred target of tyrosine-specific kinase. S100A10 functions as a linker tethering certain transmembrane proteins to annexin A2 thereby assisting their traffic to the plasma membrane and/or their firm anchorage at certain membrane sites.

Synonym: 42C;ANX2L;ANX2LG;CAL1L;Ca[1];CLP11;GP11;MGC111133;p10;P11

Molecular Weight: 12.6 kDa

NCBI Accession: [NP\\_002957](#)

Pathways: [S100 Proteins](#)

## Application Details

Restrictions: For Research Use only

## Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile 20 mM Tris, pH 8.5, 10 % glycerol

Storage: 4 °C,-20 °C,-80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.

Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.