

Datasheet for ABIN7317648 **S100A8 Protein (His tag)**

[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	S100A8
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This S100A8 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human S100A8 Protein (E.coli, His Tag)(Active)
Sequence:	Leu 2-Glu 93
Characteristics:	A DNA sequence encoding the human S100A8 (NP_002955.2) (Leu 2-Glu 93) was expressed, with a polyhistidine tag at the N-terminus.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Biological Activity Comment:	1. Measured by its ability to bind recombinant human S100A9 in a functional ELISA.2. This product displays no activity in cell-based assay.

Target Details

Target:	S100A8
Alternative Name:	S100A8 (S100A8 Products)

Target Details

Background:	Background: S100A8 is a member of the S100 protein family containing 2EF-hand calcium-binding motifs. S100 proteins are involved in the regulation of a number of cellular processes such as cell cycle progression and differentiation. Altered expression of S100A8 protein is associated with various diseases and cancers. S100A8 may have an immunoregulatory role by contributing to the regulation of fetal-maternal interactions. It may play a protective role and its absence may allow infiltration by maternal cells, a process eventually manifesting as resorption. The heterodimeric S100 protein complex S100A8/A9 which has been shown to be involved in inflammatory and neoplastic disorders. The complex can induce cell proliferation, or apoptosis, inflammation, collagen synthesis, and cell migration. S100A8/A9 has emerged as important pro-inflammatory mediator in acute and chronic inflammation. More recently, increased S100A8 and S100A9 levels were also detected in various human cancers, presenting abundant expression in neoplastic tumor cells as well as infiltrating immune cells. On the one hand, S100A8/A9 is a powerful apoptotic agent produced by immune cells, making it a very fascinating tool in the battle against cancer. It spears the risk to induce auto-immune response and may serve as a lead compound for cancer-selective therapeutics. In contrast, S100A8/A9 expression in cancer cells has also been associated with tumor development, cancer invasion or metastasis. Altogether, its expression and potential cytokine-like function in inflammation and in cancer suggests that S100A8/A9 may play a key role in inflammation-associated cancer. Synonym: Protein S100-A8,S100A8,Calgranulin-A,Cystic fibrosis antigen,Leukocyte L1 complex light chain,MRP-8,60B8AG,CAGA,CFAG,CGLA,CP-10,L1Ag,MA387,MIF,MRP8,NIF,P8
Molecular Weight:	12.2 kDa
NCBI Accession:	NP_002955
Pathways:	Transition Metal Ion Homeostasis , Positive Regulation of Endopeptidase Activity , S100 Proteins

Application Details

Restrictions:	For Research Use only
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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

Handling

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.