Datasheet for ABIN7317643

S100A9 Protein (His tag)

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Overview

Quantity:	100 µg
Target:	S100A9
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This S100A9 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human S100A9 Protein (His Tag)(Active)
Sequence:	Met 1-Pro 114
Characteristics:	A DNA sequence encoding the human S100A9 (NP_002956.1) (Met 1-Pro 114) was expressed, fused with a polyhistidine tag at the C-terminus.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.
Biological Activity Comment:	1. Measured by its ability to bind recombinant human S100A8-his in a functional ELISA.2. Measured by its ability to bind recombinant human his-S100A8 in a functional ELISA.3. Measured by its ability to inhibit proliferation of MCF7 human breast adenocarcinoma cells. The ED50 for this effect is typically 10-30 µg/mL.

Target Details

Target:	S100A9
Alternative Name:	S100A9 (S100A9 Products)
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 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-A9, also known as S100 calcium-binding protein A9, S100A9, and CAGB, is a member of the S-100 family. S100A9 is expressed by macrophages in acutely inflammed tissues and in chronic inflammation. It is also expressed in epithelial cells constitutively or induced during dermatoses. S100A9 is a calcium-binding protein. It has anti-microbial activity towards bacteria and fungi. The anti-microbial and proapoptotic activity of S100A9 is inhibited by zinc ions. S100A9 plays a role in the development of endotoxic shock in response to bacterial lipopolysaccharide (LPS). It promotes tubulin polymerization when unphosphorylated. It also promotes phagocyte migration and infiltration of granulocytes at sites of wounding. S100A9 plays a role as a pro-inflammatory mediator in acute and chronic inflammation and up-regulates the release of IL8 and cell-surface expression of ICAM1. Synonym: 60B8AG,CAGB,CFAG,CGLB,L1AG,LIAG,MAC387,MIF,MRP-14,MRP14,NIF,P14
Molecular Weight:	14.6 kDa
NCBI Accession:	NP_002956
Pathways:	Transition Metal Ion Homeostasis, Positive Regulation of Endopeptidase Activity, 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 PBS, pH 7.4

Handling

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.