Datasheet for ABIN7504941

S100A9 Protein (AA 1-114) (His tag)

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Overview

Quantity:	100 µg
Target:	S100A9
Protein Characteristics:	AA 1-114
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This S100A9 protein is labelled with His tag.

Product Details

Sequence:	Met1-Pro114
Characteristics:	A DNA sequence encoding the Human S100A9 (P06702-1) (Met1-Pro114) was expressed with a polyhistidine tag at the N-terminus.
Purity:	> 80 % as determined by reducing SDS-PAGE.

Target Details

Target:	S100A9
Alternative Name:	S100A9 (S100A9 Products)
Background:	Abbreviation: S100A9 Target Synonym: Protein S100-A9,Calgranulin-B,Calprotectin L1H subunit,Leukocyte L1 complex heavy chain,Migration inhibitory factor-related protein 14,MRP-14,p14,S100 calcium-binding protein A9,CAGB,CFAG,MRP14

Target Details

	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. 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. 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.
Molecular Weight:	Calculated MW: 13.24 kDa Observed MW: 15.54 kDa
UniProt:	P06702-1
Pathways:	Transition Metal Ion Homeostasis, Positive Regulation of Endopeptidase Activity, S100 Proteins

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Buffer:	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01 % Tween80 are added as protectants before lyophilization.
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.

Handling

	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.
Expiry Date:	12 months