

Datasheet for ABIN7505374

S100A8 Protein (AA 2-89) (His tag)



Overview

Quantity:	100 μg
Target:	S100A8
Protein Characteristics:	AA 2-89
Origin:	Mouse
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This S100A8 protein is labelled with His tag.
Application:	Immunogen (Imm)

Product Details

Sequence:	Pro2-Glu89
Characteristics:	A DNA sequence encoding the Mouse S100a8 protein(P27005) (2P-89G) was expressed with a
	polyhistidine tag at the N-terminus.
Purity:	> 90 % as determined by reducing SDS-PAGE.

Target Details

Target:	S100A8
Alternative Name:	S100a8 (S100A8 Products)
Background:	Abbreviation: S100a8
	Target Synonym: 60B8AG,CAGA,Calgranulin A,Calprotectin L1L subunit,CFAG,CGLA,CP
	10,Cystic fibrosis antigen,L1Ag,MA387,MIF,MRP-8,MRP8,NIF,P8,Protein S100-

A8,S100A8,Urinary stone p	protein band A,Pro-inflammatory S100	cytokine,S100 calcium-binding
protein A8		

Background: S100A8 is a calcium- and zinc-binding protein which plays a prominent role in the regulation of inflammatory processes and immune response. It can induce neutrophil chemotaxis and adhesion. Predominantly found as calprotectin (S100A8/A9) which has a wide plethora of intra- and extracellular functions. The intracellular functions include: facilitating leukocyte arachidonic acid trafficking and metabolism, modulation of the tubulin-dependent cytoskeleton during migration of phagocytes and activation of the neutrophilic NADPH-oxidase. Activates NADPH-oxidase by facilitating the enzyme complex assembly at the cell membrane, transferring arachidonic acid, an essential cofactor, to the enzyme complex and S100A8 contributes to the enzyme assembly by directly binding to NCF2/P67PHOX. The extracellular functions involve proinflammatory, antimicrobial, oxidant-scavenging and apoptosis-inducing activities. Its proinflammatory activity includes recruitment of leukocytes, promotion of cytokine and chemokine production, and regulation of leukocyte adhesion and migration.

Molecular Weight:

Calculated MW: 11.5 kDa
Observed MW: 10-11 kDa

UniProt:

P27005

Pathways:

Transition Metal Ion Homeostasis, Positive Regulation of Endopeptidase Activity, S100 Proteins

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.	
Comment:	used as Immunogen for (ABIN6999927, ABIN7234313, ABIN7234314 and ABIN7234315)	
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. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted

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samples are stable at < -20°C for 3 months.

Expiry Date: 12 months