

Datasheet for ABIN5710300 S100A8 Protein (AA 2-89) (His-SUMO Tag)

Image



Overview

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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-SUMO Tag.	
Application:	SDS-PAGE (SDS)	

Product Details

Sequence:	PSELEKALSN LIDVYHNYSN IQGNHHALYK NDFKKMVTTE CPQFVQNINI ENLFRELDIN	
	SDNAINFEEF LAMVIKVGVA SHKDSHKE	
Purification:	SDS-PAGE	
Purity:	> 90 %	

Target Details

Target:	S100A8	
Alternative Name:	S10A8 (S100A8 Products)	
Background:	S100A8 is a calcium- and zinc-binding protein which plays a prominent role in the regulatio inflammatory processes and immune response. It can induce neutrophil chotaxis and	
	adhesion. Predominantly found as calprotectin (S100A8/A9) which has a wide plethora of intra-	

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 1/3 | Product datasheet for ABIN5710300 | 07/25/2024 | Copyright antibodies-online. All rights reserved. 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 NADPHoxidase by facilitating the enzyme complex assbly at the cell mbrane, transferring arachidonic acid, an essential cofactor, to the enzyme complex and S100A8 contributes to the enzyme assbly by directly binding to NCF2/P67PHOX. The extracellular functions involve proinfammatory, antimicrobial, oxidant-scavenging and apoptosis-inducing activities. Its proinflammatory activity includes recruitment of leukocytes, promotion of cytokine and chokine production, and regulation of leukocyte adhesion and migration. Acts as an alarmin or a danger associated molecular pattern (DAMP) molecule and stimulates innate immune cells via binding to pattern recognition receptors such as Toll-like receptor 4 (TLR4) and receptor for advanced glycation endproducts (AGER). Binding to TLR4 and AGER activates the MAP-kinase and NFkappa-B signaling pathways resulting in the amplification of the proinflammatory cascade. Has antimicrobial activity towards bacteria and fungi and exerts its antimicrobial activity probably via chelation of Zn2+ which is essential for microbial growth. Can induce cell death via autophagy and apoptosis and this occurs through the cross-talk of mitochondria and lysosomes via reactive oxygen species (ROS) and the process involves BNIP3. Can regulate neutrophil number and apoptosis by an anti-apoptotic effect, regulates cell survival via ITGAM/ITGB and TLR4 and a signaling mechanism involving MEK-ERK. Its role as an oxidant scavenger has a protective role in preventing exaggerated tissue damage by scavenging oxidants. The iNOS-S100A8/A9 transnitrosylase complex is proposed to direct selective inflammatory stimulus-dependent S-nitrosylation of multiple targets such as GAPDH, ANXA5, EZR, MSN and VIM by recognizing a [IL]-x-C-x-x-[DE] motif, S100A8 ses to contribute to Snitrosylation site selectivity.

Molecular Weight:	26.16 kDa	
UniProt:	P27005	
Pathways:	Transition Metal Ion Homeostasis, Positive Regulation of Endopeptidase Activity, S100 Pr	

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.	
Restrictions:	For Research Use only	

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Handling

Format:	Liquid	
Concentration:	0.1-2 mg/mL	
Buffer:	20 mM Tris-HCl based buffer, pH 8.0	
Storage:	-80 °C,4 °C,-20 °C	
Storage Comment:	Store at -20°C, for extended storage, conserve at -20°C or -80°C. Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.	

Images

		SDS-PAGE
	116 kDa	Image 1
-	66.2 kDa	illidye I.
-	45 kDa	
	35 kDa	
	25 kDa	
States and		
	18. 4kDa	
-	14.4 kDa	