

Rabbit anti-Human S100A9 Polyclonal Antibody | anti-S100A9 antibody

S100A9 Antibody, Biotin conjugated

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA119544	Rabbit	Human	ELISA

PRODUCT SYNONYMS

S100A9; Polyclonal Antibody; S100A9 Antibody; Biotin conjugated; 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; anti-S100A9 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	IgG
Purity/Purification	>95%, Protein G Purified
Form/Format	Liquid
Applicable Applications for anti-S100A9 antibody	ELISA
Storage Buffer	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, PH 7.4
Conjugate	Biotin
Immunogen	Recombinant Human Protein S100-A9 protein (2-114AA)
Species	Homo sapiens (Human)
Research Area	Immunology
Santa Cruz Alternative	Potential replacement for Santa Cruz Biotechnology antibody catalog# sc-8114 / sc-20173
Preparation and Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

ADDITIONAL INFORMATION

Related Product Information for anti-S100A9 antibody	S100A9 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, adhesion, can increase the bactericidal activity of neutrophils by promoting phagocytosis via activation of SYK, PI3K/AKT, and ERK1/2 and can induce degranulation of neutrophils by a MAPK-dependent mechanism. 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. 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 NF-kappa-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 Zn(2+) 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. Can act as a potent amplifier of inflammation in autoimmunity as well as in cancer development and tumor spread. Has transnitrosylase activity; in oxidatively-modified low-density lipoprotein (LDL(ox))-induced S-nitrosylation of GAPDH on 'Cys-247' proposed to transfer the NO moiety from NOS2/iNOS to GAPDH via its own S-nitrosylated Cys-3. The iNOS-S100A8/A9 transnitrosylase complex is proposed to also direct selective inflammatory stimulus-dependent S-nitrosylation of multiple targets such as ANXA5, EZR, MSN and VIM by recognizing a [IL]-x-C-x-x-[DE] motif.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4506773
NCBI GeneID	6280
NCBI Accession #	NP_002956.1
NCBI GenBank Nucleotide #	NM_002965.3
UniProt Accession #	P06702; Q6FGA1; Q9NYM0; Q9UCJ1; D3DV36
NCBI Official Full Name	protein S100-A9
NCBI Official Synonym Full Names	S100 calcium binding protein A9
NCBI Official Symbol	S100A9
NCBI Official Synonym Symbols	MIF; NIF; P14; CAGB; CFAG; CGLB; L1AG; LIAG; MRP14; 60B8AG; MAC387
NCBI Protein Information	protein S100-A9
UniProt Protein Name	Protein S100-A9
UniProt Gene Name	S100A9
UniProt Synonym Gene Names	CAGB; CFAG; MRP14; MRP-14; p14
UniProt Entry Name	S10A9_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.