

Anti-S10AC antibody



Description Unconjugated Rabbit polyclonal to S10AC

Model STJ192350

Host Rabbit

Reactivity Human

Applications ELISA, WB

Immunogen Synthesized peptide derived from human S10AC protein.

Immunogen Region 1-80aa

Gene ID <u>6283</u>

Gene Symbol S100A12

Dilution range WB 1:500-2000 ELISA 1:5000-20000

Specificity S10AC Polyclonal Antibody detects endogenous levels of protein.

Tissue Specificity Predominantly expressed by neutrophils, monocytes and activated

macrophages. Expressed by eosinophils and macrophages in asthmatic airways in regions where mast cells accumulate. Found in high concentrations in the serum of patients suffering from various inflammatory disorders, such as rheumatoid arthritis, psoriatic arthritis, Crohn's disease, ulcerative colitis,

and Kawasaki disease.

Purification S10AC antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Protein S100-A12 CGRP Calcium-binding protein in amniotic fluid 1 CAAF1

Calgranulin-C CAGC Extracellular newly identified RAGE-binding protein

EN-RAGE Migration inhibitory factor-related protein 6 MRP-

Molecular Weight 10 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid form in PBS containing 50% glycerol, and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links HGNC:104890MIM:603112

Alternative Names Protein S100-A12 CGRP Calcium-binding protein in amniotic fluid 1 CAAF1

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Function S100A12 is a calcium-, zinc- and copper-binding protein which plays a

prominent role in the regulation of inflammatory processes and immune response. Its proinflammatory activity involves 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 receptor for advanced glycation endproducts (AGER). Binding to AGER activates the MAP-kinase and NF-kappa-B signaling pathways leading to production of proinflammatory cytokines and up-regulation of cell adhesion

molecules ICAM1 and VCAM1. Acts as a monocyte and mast cell

chemoattractant. Can stimulate mast cell degranulation and activation which generates chemokines, histamine and cytokines inducing further leukocyte recruitment to the sites of inflammation. Can inhibit the activity of matrix metalloproteinases; MMP2, MMP3 and MMP9 by chelating Zn(2+) from their active sites. Possesses filariacidal and filariastatic activity. Calcitermin possesses antifungal activity against C.albicans and is also active against

E.coli and P.aeruginosa but not L.monocytogenes and S.aureus.

Sequence and Domain Family The hinge domain contributes significantly to its chemotactic properties.

Cellular Localization Secreted Cytoplasm Cytoplasm, cytoskeleton Cell membrane. Predominantly

localized in the cytoplasm. Upon elevation of the intracellular calcium level, translocated from the cytoplasm to the cytoskeleton and the cell membrane. Upon neutrophil activation is secreted via a microtubule-mediated, alternative

pathway.