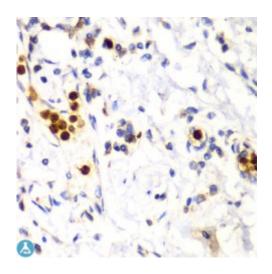


Anti-S100A12 Antibody



Description

The protein encoded by this gene is a member of the S100 family of proteins containing 2 EF-hand calcium-binding motifs. S100 proteins are localized in the cytoplasm and/or nucleus of a wide range of cells, and involved in the regulation of a number of cellular processes such as cell cycle progression and differentiation. S100 genes include at least 13 members which are located as a cluster on chromosome 1q21. This protein is proposed to be involved in specific calcium-dependent signal transduction pathways and its regulatory effect on cytoskeletal components may modulate various neutrophil activities. The protein includes an antimicrobial peptide which has antibacterial activity.

Model STJ114373

Host Rabbit **Reactivity** Human

Applications IHC

Immunogen Recombinant fusion protein containing a sequence corresponding to amino

acids 1-92 of human S100A12 (NP_005612.1).

Gene ID 6283

Gene Symbol S100A12

Dilution range IHC 1:50 - 1:100

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 Affinity purification

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 10.575 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Storage Instruction Store at -20C. Avoid freeze / thaw cycles.

Database Links HGNC:10489OMIM:603112Reactome:R-HSA-1810476

Alternative Names 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-

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

Cellular Localization Secreted,

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