

S100A12 / CGRP Antibody (clone 1D1)
Mouse Monoclonal Antibody
Catalog # ALS17186**Specification**

S100A12 / CGRP Antibody (clone 1D1) - Product Information

Application	IHC-P, WB
Primary Accession	P80511
Other Accession	6283
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	10575

S100A12 / CGRP Antibody (clone 1D1) - Additional Information**Gene ID** 6283**Other Names**

S100A12, Calgranulin-C, CGRP, CAAF1, ENRAGE, MRP-6, MRP6, Neutrophil S100 protein, Protein S100-A12, CAGC, Calgranulin C, EN-RAGE, p6

Target/Specificity

Human S100A12 / CGRP

Reconstitution & Storage

PBS, pH 7.3, 1% BSA, 50% glycerol, 0.02% sodium azide. Store at -20°C. Minimize freezing and thawing.

Precautions

S100A12 / CGRP Antibody (clone 1D1) is for research use only and not for use in diagnostic or therapeutic procedures.

S100A12 / CGRP Antibody (clone 1D1) - Protein Information**Name** S100A12**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 pro-inflammatory 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 pro-inflammatory 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*.

Cellular Location

Secreted. Cytoplasm. Cytoplasm, cytoskeleton. Cell membrane; Peripheral membrane protein. Note=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

Tissue Location

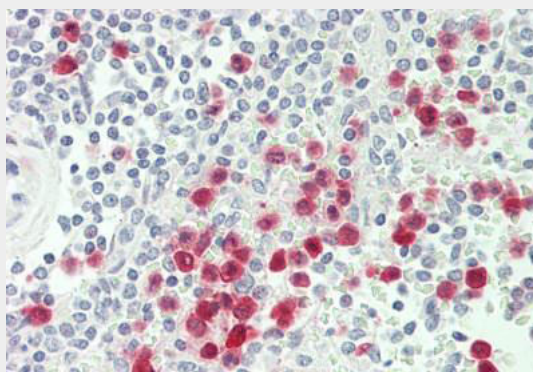
Predominantly expressed by neutrophils, monocytes and activated macrophages. Expressed by eosinophils and macrophages in asthmatic airways in regions where mast cells accumulate. Found in high concentrations in the serum of patients suffering from various inflammatory disorders, such as rheumatoid arthritis,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

S100A12 / CGRP Antibody (clone 1D1) - Protocols

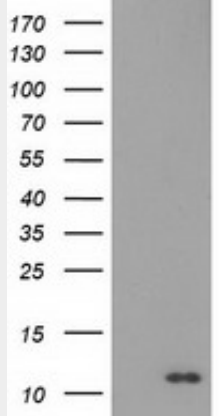
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

S100A12 / CGRP Antibody (clone 1D1) - Images



Human Spleen: Formalin-Fixed, Paraffin-Embedded (FFPE)



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY S100A12...

S100A12 / CGRP Antibody (clone 1D1) - Background

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*.

S100A12 / CGRP Antibody (clone 1D1) - References

Yamamura T.,et al.Biochem. Biophys. Res. Commun. 221:356-360(1996).
Wicki R.,et al.Cell Calcium 20:459-464(1996).
Gregory S.G.,et al.Nature 441:315-321(2006).
Marti T.,et al.Biochem. Biophys. Res. Commun. 221:454-458(1996).
Ilg E.C.,et al.Biochem. Biophys. Res. Commun. 225:146-150(1996).