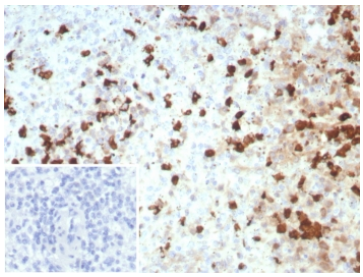
Calgranulin C Antibody / S100A12 Antibody [clone S100A12/8952R] (V4741)

Catalog No.	Formulation	Size
V4741-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4741-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4741SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

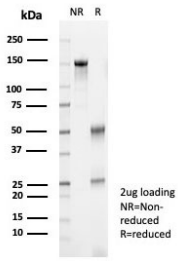
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	S100A12/8952R
Purity	Protein A/G affinity
UniProt	P80511
Localization	Secreted
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This Calgranulin C Antibody is available for research use only.



Calgranulin C Antibody (clone S100A12/8952R) in human spleen tissue. Immunohistochemistry staining of FFPE human spleen demonstrates cytoplasmic staining in scattered inflammatory cells consistent with the known expression of S100 calcium binding protein A12 / S100A12 in neutrophils and myeloid-derived cells. Brown chromogenic signal highlights S100A12-positive inflammatory cells within splenic tissue while surrounding lymphoid cells remain largely negative. The inset shows PBS used in place of primary antibody as a secondary-only negative control. Heat-induced epitope retrieval was performed by boiling tissue sections in pH 9 Tris buffer with 1 mM EDTA for 20 min before staining.



SDS-PAGE analysis of purified, BSA-free Calgranulin C Antibody (clone S100A12/8952R) as confirmation of integrity and purity.

Description

S100 calcium binding protein A12 (S100A12) is a member of the S100 family of calcium-binding proteins encoded by the S100A12 gene and expressed predominantly by neutrophils and activated myeloid cells. Calgranulin C Antibody enables detection of S100A12 protein in cells and tissues and supports studies investigating inflammatory cell biology and innate immune responses. S100A12, also widely known as Calgranulin C and EN-RAGE (extracellular newly identified RAGE-binding protein), functions as a pro-inflammatory mediator involved in leukocyte activation, cytokine signaling, and host defense mechanisms.

S100A12 belongs to the EF-hand calcium-binding protein family and participates in inflammatory signaling through interactions with receptors such as the receptor for advanced glycation end products (RAGE). Binding of S100A12 to RAGE can activate downstream signaling pathways associated with inflammation, leukocyte recruitment, and endothelial activation. Because of these biological roles, S100A12 has been extensively studied in inflammatory disorders including autoimmune diseases, cardiovascular inflammation, and chronic inflammatory conditions where neutrophil activation plays a central role.

Expression of S100A12 is highly enriched in neutrophils and granulocytes and is commonly associated with inflammatory cell infiltration in tissues. In histological samples, S100A12 protein is typically detected within the cytoplasm of neutrophils and other myeloid-derived inflammatory cells. These staining patterns allow researchers to identify infiltrating inflammatory cells and evaluate immune responses within tissue microenvironments. Detection of S100A12 is therefore useful in studies examining inflammatory cell distribution and the contribution of neutrophil-driven inflammation to disease processes.

A recombinant rabbit monoclonal antibody, clone S100A12/8952R, recognizes S100A12 protein and supports detection of Calgranulin C expression in research applications. Calgranulin C Antibody allows investigators to evaluate S100A12 distribution in tissues, characterize inflammatory cell populations, and study the biological role of S100A12 in innate immune signaling pathways. Such studies contribute to a broader understanding of inflammatory regulation, leukocyte biology, and the involvement of S100A12 in inflammatory disease mechanisms.

Application Notes

Optimal dilution of the Calgranulin C Antibody should be determined by the researcher.

Immunogen

A recombinant partial protein sequence (within amino acids 1-95) from the human protein was used as the immunogen for the Calgranulin C Antibody.

Storage

Aliquot the Calgranulin C Antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

S100A12 antibody, EN-RAGE antibody, S100 calcium binding protein A12 antibody, Calgranulin C protein antibody