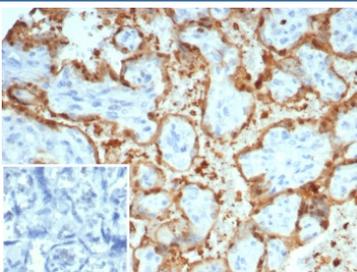


S100A12 Antibody / EN-RAGE Antibody [clone S100A12/4514] (V4734)

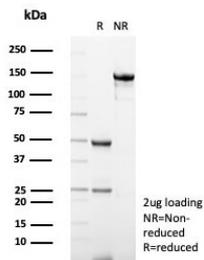
Catalog No.	Formulation	Size
V4734-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4734-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4734SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

[Bulk quote request](#)

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	S100A12/4514
Purity	Protein A/G affinity
UniProt	P80511
Localization	Secreted
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This S100A12 antibody is available for research use only.



S100A12 Antibody / EN-RAGE Antibody (clone S100A12/4514) in human placental tissue. Immunohistochemistry staining of FFPE human placenta demonstrates cytoplasmic staining in scattered inflammatory cells consistent with the known expression of S100 calcium binding protein A12 / S100A12 in neutrophils and other myeloid-derived cells. Brown chromogenic signal highlights S100A12-positive inflammatory cells within placental tissue while surrounding trophoblastic and stromal 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 S100A12/EN-RAGE antibody (clone S100A12/4514) as confirmation of integrity and purity.

Description

S100 calcium binding protein A12 (S100A12) is a member of the S100 family of EF-hand calcium-binding proteins encoded by the S100A12 gene and expressed predominantly by neutrophils and activated myeloid cells. S100A12 Antibody recognizes S100A12 protein and supports research investigating inflammatory cell biology and innate immune signaling. S100A12 is also widely known as Calgranulin C and EN-RAGE (extracellular newly identified RAGE-binding protein), reflecting its role as a pro-inflammatory mediator released by activated neutrophils during inflammatory responses.

S100A12 participates in inflammatory signaling through interactions with the receptor for advanced glycation end products (RAGE). Binding of S100A12 to RAGE activates downstream pathways involved in cytokine production, leukocyte recruitment, and endothelial activation. Through these mechanisms S100A12 contributes to host defense responses and inflammatory regulation in 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 localized within the cytoplasm of infiltrating neutrophils and other myeloid-derived inflammatory cells. These staining patterns allow investigators to identify S100A12-positive neutrophils and evaluate inflammatory cell distribution within tissue microenvironments. Because neutrophils are the dominant cellular source of S100A12, detection of this protein is frequently used as a marker of neutrophil-associated inflammation in tissues.

A mouse monoclonal antibody, clone S100A12/4514, recognizes S100A12 protein and enables detection of EN-RAGE expression in research applications. S100A12 Antibody allows investigators to examine inflammatory cell localization, evaluate neutrophil infiltration, and study the biological role of S100A12 in innate immune signaling pathways and inflammatory disease mechanisms.

Application Notes

Optimal dilution of the S100A12 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 S100A12/EN-RAGE antibody.

Storage

Aliquot the S100A12 antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

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

