S100A12 Antibody for IHC / S100 Calcium Binding Protein A12 Antibody for Immunohistochemistry [clone MSVA-812M] (V6109)

Catalog No.	Formulation	Size
V6109-100UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V6109-20UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug

Recombinant | MOUSE MONOCLONAL

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	MSVA-812M
UniProt	P80511
Localization	Secreted
Applications	Immunohistochemistry (FFPE) : 1:100-1:200
Limitations	This S100A12/S100 calcium binding protein A12 antibody is available for research use only.

100A12 Antibody for IHC (clone MSVA-812M) in human tissue microarray (TMA). Immunohistochemistry analysis of FFPE human tissue microarray sections containing multiple normal and cancer tissues using S100A12 Antibody for IHC demonstrates cytoplasmic staining in scattered inflammatory cells, consistent with the known expression pattern of S100 Calcium Binding Protein A12 / S100A12 in neutrophils and other myeloid-derived cells. The recombinant mouse monoclonal antibody clone MSVA-812M highlights infiltrating granulocytes within several tissue types while epithelial and stromal compartments remain largely negative. Observed staining patterns across the human tissue microarray panel align with reported S100A12 expression profiles in the Human Protein Atlas.

Description

S100 calcium binding protein A12 (S100A12) is a calcium-binding protein encoded by the S100A12 gene and belonging to the S100 family of EF-hand calcium-binding proteins. S100A12 Antibody for IHC enables visualization of S100 Calcium Binding Protein A12 expression in formalin-fixed paraffin-embedded tissue sections using immunohistochemistry. S100A12, also referred to as Calgranulin C or EN-RAGE (extracellular newly identified RAGE-binding protein), is

predominantly expressed by neutrophils and activated myeloid cells where it functions as a pro-inflammatory mediator involved in innate immune responses and inflammatory signaling pathways.

Immunohistochemistry studies commonly detect S100A12 protein within neutrophils, granulocytes, and other inflammatory cell populations present in tissues undergoing inflammatory responses. In histological sections, S100A12 staining typically appears within the cytoplasm of infiltrating neutrophils and inflammatory cells, allowing clear visualization of these cells within the surrounding tissue architecture. Because S100A12 is associated with inflammatory cell infiltration, immunohistochemical staining is often used to evaluate inflammatory microenvironments and immune cell presence within tissue samples.

Large-scale tissue expression analysis using human tissue microarray (TMA) panels provides an efficient method for examining S100A12 distribution across many tissue types simultaneously. In human tissue microarray studies containing multiple normal and cancer tissues, S100A12 staining is generally restricted to scattered inflammatory cells rather than epithelial or stromal compartments. These patterns allow investigators to distinguish inflammatory cell populations within different tissues and to evaluate immune infiltration across a broad spectrum of tissue environments while maintaining consistent staining conditions across all specimens.

A recombinant mouse monoclonal antibody, clone MSVA-812M, recognizes S100A12 protein and supports immunohistochemical detection of S100A12 in FFPE human tissues. When applied to human tissue microarray (TMA) panels containing multiple normal and cancer tissues, S100A12 Antibody for IHC highlights neutrophils and other myeloid-derived inflammatory cells present within tissue sections. These staining patterns allow researchers to visualize inflammatory cell localization directly within histological tissue architecture and facilitate studies examining immune cell distribution and inflammatory responses in normal and disease-associated tissues.

Application Notes

1. Optimal dilution of the S100A12 Antibody for IHC antibody should be determined by the researcher.

2. This S100A12/S100 calcium binding protein A12 antibody is recombinantly produced by expression in CHO cells.

3. Manual Protocol: Freshly cut sections should be used (less than 10 days between cutting and staining). Heat-induced antigen retrieval for 5 minutes in an autoclave at 121oC in pH 7.8 Target Retrieval Solution buffer. Apply the antibody at a dilution of 1:150 at 37oC for 60 minutes. Visualization of bound antibody by the EnVision Kit (Dako, Agilent) according to the manufacturer's directions.

Immunogen

A recombinant fragment (around amino acids 1-95) of human S100A12 protein (exact sequence is proprietary) was used as the immuongen for the S100A12/S100 calcium binding protein A12 antibody.

Storage

S100A12/S100 calcium binding protein A12 antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.

Alternate Names

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

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