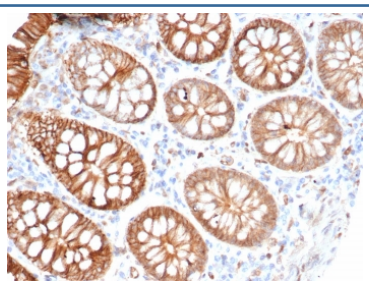
S100A16 Antibody / Epithelial Differentiation Marker [clone S100A16/7411] (V4719)

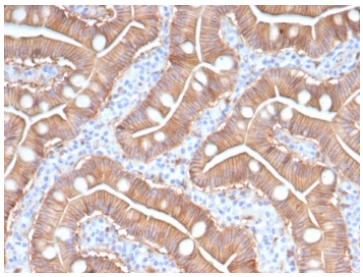
Catalog No.	Formulation	Size
V4719-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4719-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4719SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

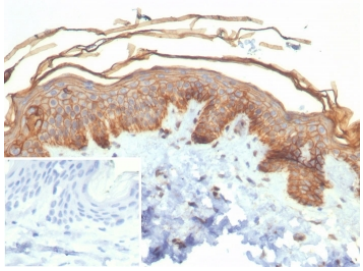
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2, kappa
Clone Name	S100A16/7411
Purity	Protein A/G affinity
UniProt	Q96FQ6
Localization	Nucleus, Cytoplasm
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT Western Blot : 2-4ug/ml
Limitations	This S100A16 Antibody / Epithelial Differentiation Marker is available for research use only.



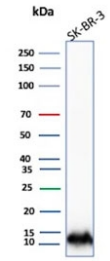
S100A16 Antibody Glandular Tumor IHC. Immunohistochemistry of S100 calcium binding protein A16 / S100A16 in FFPE human colon carcinoma tissue using mouse monoclonal S100A16 antibody, clone S100A16/7411. HRP-DAB brown staining highlights cytoplasmic and membranous labeling of tumor epithelial cells forming glandular structures, consistent with epithelial differentiation, while surrounding stromal cells show minimal staining and nuclei are counterstained blue. Heat induced epitope retrieval was performed by boiling tissue sections in pH 9 10 mM Tris with 1 mM EDTA for 20 min followed by cooling prior to staining.



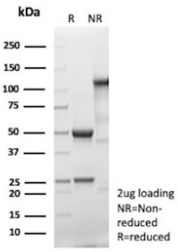
S100A16 Antibody Intestinal Epithelium IHC. Immunohistochemistry of S100 calcium binding protein A16 / S100A16 in FFPE human duodenum tissue using mouse monoclonal S100A16 antibody, clone S100A16/7411. HRP-DAB brown staining highlights strong cytoplasmic and membranous labeling of enterocytes lining villous structures, consistent with epithelial differentiation, while lamina propria cells show minimal staining and nuclei are counterstained blue. Heat induced epitope retrieval was performed by boiling tissue sections in pH 9 10 mM Tris with 1 mM EDTA for 20 min followed by cooling prior to staining.



S100A16 Antibody Epidermal Layer IHC. Immunohistochemistry of S100 calcium binding protein A16 / S100A16 in FFPE human skin tissue using mouse monoclonal S100A16 antibody, clone S100A16/7411. HRP-DAB brown staining highlights strong cytoplasmic and membranous labeling of keratinocytes across the epidermal layers, consistent with epithelial differentiation, while underlying dermal components show minimal staining and nuclei are counterstained blue. Inset: PBS was used in place of primary antibody as a negative control to confirm specificity of staining. Heat induced epitope retrieval was performed by boiling tissue sections in pH 9 10 mM Tris with 1 mM EDTA for 20 min followed by cooling prior to staining.



S100A16 Antibody SK-BR-3 WB. Western blot analysis of S100 calcium binding protein A16 / S100A16 in human SK-BR-3 cell lysate using S100A16 antibody. A band is detected at approximately 10-12 kDa, consistent with the predicted molecular weight of S100A16, supporting detection of this small calcium-binding protein in epithelial-derived cells.



SDS-PAGE analysis of purified, BSA-free S100A16 antibody (clone S100A16/7411) as confirmation of integrity and purity.

Description

S100 calcium binding protein A16 (S100A16) is a member of the S100 family of EF-hand calcium-binding proteins involved in the regulation of cellular differentiation, proliferation, and structural organization. S100A16 Antibody / Epithelial Differentiation Marker (clone S100A16/7411) is used to study epithelial cell maturation and tissue organization, where S100A16 expression is frequently associated with differentiated cell states. S100A16 antibody, also referred to as S100 calcium binding protein A16 antibody in the literature, is widely used in studies of epithelial biology and tissue development.

S100A16 is expressed in a variety of epithelial tissues, where it contributes to processes such as cell adhesion, cytoskeletal organization, and differentiation. Unlike some S100 family members that are associated with proliferative or inflammatory states, S100A16 is often linked to more differentiated phenotypes, making it useful for distinguishing stages of epithelial maturation. Its localization is typically cytoplasmic, with occasional membrane-associated distribution depending on cell type and context.

Functionally, S100A16 participates in calcium-dependent signaling pathways that regulate protein-protein interactions and structural dynamics within the cell. Through these interactions, it influences cellular morphology and contributes to the

maintenance of tissue architecture. Its expression pattern suggests a role in stabilizing differentiated epithelial states and supporting normal tissue function.

In immunohistochemistry, S100A16 is observed in epithelial layers of tissues such as skin and glandular structures, where it highlights differentiated cell populations. This makes S100A16 antibody particularly useful for studies examining epithelial stratification, tissue remodeling, and differentiation gradients within normal and diseased tissues.

Altered expression of S100A16 has been reported in various cancers, where it may be associated with changes in differentiation status and tumor progression. Its expression pattern can provide insight into tumor biology, particularly in epithelial-derived malignancies where differentiation state is a key factor in disease characterization.

The mouse monoclonal clone S100A16/7411 antibody provides reliable detection of S100A16 in research applications. Its emphasis on epithelial differentiation makes it well suited for studies of tissue development, structural organization, and cellular maturation.

For a reference S100A16 antibody highlighting epithelial differentiation patterns, see clone S100A16/7412.

Application Notes

Optimal dilution of the S100A16 Antibody / Epithelial Differentiation Marker should be determined by the researcher.

Immunogen

A recombinant partial protein sequence (within amino acids 1-103) from the human protein was used as the immunogen for the S100A16 antibody.

Storage

Aliquot the S100A16 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

S100A16 antibody, S100 calcium binding protein A16 antibody, S100A16 protein antibody, Epithelial differentiation marker antibody, S100 family protein antibody