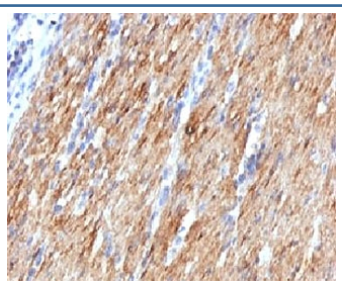
SMMHC Antibody [clone MYH11/923] (V2751)

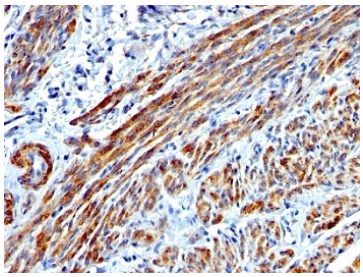
Catalog No.	Formulation	Size
V2751-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2751-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2751SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2751IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

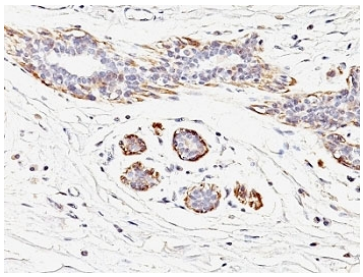
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	MYH11/923
Purity	Protein G affinity chromatography
UniProt	P35749
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This SMMHC antibody is available for research use only.



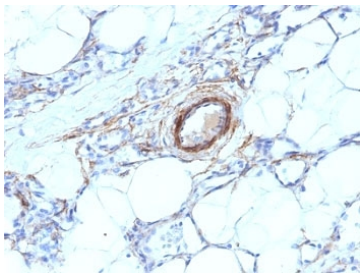
IHC: Formalin-fixed, paraffin-embedded human colon carcinoma stained with SMMHC antibody (MYH11/923).



SMMHC Antibody Leiomyosarcoma IHC. Immunohistochemical staining of formalin fixed, paraffin embedded human leiomyosarcoma demonstrates Smooth Muscle Myosin Heavy Chain expression using SMMHC antibody clone MYH11/923. SMMHC, encoded by the MYH11 gene, is a highly specific marker of mature smooth muscle differentiation and an essential component of the contractile apparatus. Strong cytoplasmic staining is observed throughout intersecting fascicles of spindle-shaped tumor cells, consistent with smooth muscle lineage and supporting the diagnosis of leiomyosarcoma. Vascular smooth muscle elements are also prominently labeled. These findings demonstrate the utility of SMMHC Antibody for studies of smooth muscle neoplasms, tumor classification, and differentiation markers in surgical pathology.



IHC: Formalin-fixed, paraffin-embedded human breast carcinoma stained with SMMHC antibody (MYH11/923).



SMMHC Antibody Angiosarcoma IHC. Immunohistochemical staining of formalin fixed, paraffin embedded human angiosarcoma demonstrates Smooth Muscle Myosin Heavy Chain expression using SMMHC antibody clone MYH11/923. SMMHC, encoded by the MYH11 gene, is a highly specific marker of differentiated smooth muscle cells and vascular smooth muscle. In this vascular neoplasm, strong cytoplasmic staining is confined to the muscular walls of blood vessels and perivascular smooth muscle elements, while the surrounding angiosarcoma cells show minimal reactivity. This staining pattern highlights the specificity of SMMHC for smooth muscle differentiation and aids in distinguishing vascular smooth muscle structures from endothelial-derived tumor cells. These findings support the utility of SMMHC Antibody for studies of soft tissue pathology, vascular biology, and smooth muscle differentiation.

Description

Smooth muscle myosin heavy chain (SM-MHC) is a cytoplasmic structural protein, which is a major component of the contractile apparatus in smooth muscle cells. Expression of smooth muscle myosin is developmentally regulated, appearing early in smooth muscle development, and is specific for smooth muscle development. Two isoforms of smooth muscle myosin heavy chain have been identified, designated MHC-1 and MHC-2. The antibody may be useful for the study of breast tumors as the presence of an intact layer of myoepithelial cells is an important feature, which may distinguish benign breast lesions and carcinoma in situ from invasive tumors.

Visit our SMMHC Antibody page to discover additional antibodies against this Smooth Muscle Differentiation Marker, including reagents for studies of vascular biology, contractility, and smooth muscle pathology.

Application Notes

Optimal dilution of the SMMHC antibody should be determined by the researcher.

1. Staining of formalin/paraffin tissues requires boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Recombinant human protein was used as the immunogen for the SMMHC antibody.

Storage

Store the SMMHC antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

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