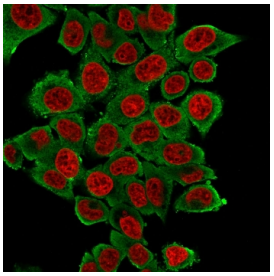
Smooth Muscle Actin Antibody [clone SPM332] (V9076)

Catalog No.	Formulation	Size
V9076-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V9076-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20
V9076SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100
V9076IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7

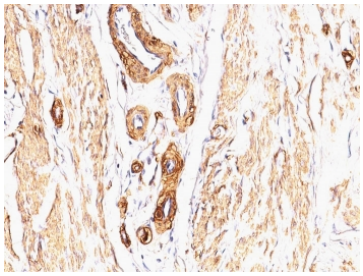
Citations (11)

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	SPM332
Purity	Protein G affinity chromatography
UniProt	P62736
Localization	Cytoplasmic
Applications	Immunofluorescence: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This Smooth Muscle Actin antibody is available for research use only.



Immunofluorescent staining of fixed human HeLa cells with Smooth Muscle Actin antibody (clone SPM332, green) and NucSpot nuclear stain (red).



IHC: Formalin-fixed, paraffin-embedded Leiomyosarcoma stained with Smooth Muscle Actin antibody (clone SPM332).

Description

Actin is a major component of the cytoskeleton and is present in most cell types. This mAb is highly specific to actin from smooth muscles. Its epitope lies in the first four N-terminal amino acids. This mAb does not stain cardiac or skeletal muscle; however, it does stain myofibroblasts and myoepithelial cells. This antibody could be used together with anti-muscle specific actin and myogenin in making a diagnosis of smooth muscle and skeletal muscle tumors. In most cases of rhabdomyosarcoma, this antibody yields negative results whereas anti-muscle specific actin and myogenin are positive. Leiomyosarcomas are positive only with anti-muscle specific actin and anti-smooth muscle actin and are negative with anti-myogenin.

Application Notes

The optimal dilution of the Smooth Muscle Actin antibody for each application should be determined by the researcher.

1. Staining of formalin-fixed tissues requires boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 minutes.
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

A 10 amino acid peptide from the alpha smooth muscle isoform of actin was used as the immunogen for this Smooth Muscle Actin antibody.

Storage

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

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