Datasheet for ABIN3024118

anti-Smooth Muscle Actin antibody (N-Term)

3 Images

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Overview

Quantity:	100 µg
Target:	Smooth Muscle Actin (ACTA2)
Binding Specificity:	N-Term
Reactivity:	Human, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Smooth Muscle Actin antibody is un-conjugated
Application:	Immunofluorescence (IF), Flow Cytometry (FACS), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	An N-terminal decapeptide of the alpha smooth muscle isoform of Actin (1A4) and recombinant full-length human protein (ACTA2/791) were used as the immunogen for the ACTA2 antibody cocktail.
Clone:	1A4-ACTA2-791
Isotype:	IgG
Characteristics:	Actin is a major component of the cytoskeleton and is present in most cell types. It is highly specific to actin from smooth muscles. 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

Product Details

	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.
Purification:	Protein G affinity chromatography

Target Details

Target:	Smooth Muscle Actin (ACTA2)
Alternative Name:	ACTA2 (ACTA2 Products)
Background:	Actin is a major component of the cytoskeleton and is present in most cell types. It is highly specific to actin from smooth muscles. 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.
Pathways:	Myometrial Relaxation and Contraction, Skeletal Muscle Fiber Development

Application Details

Application Notes:	Optimal dilution of the ACTA2 antibody cocktail should be determined by the researcher. 1. Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM Citrate buffer, pH 6.0, 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.\. Flow Cytometry: 0.5-1 µg/million cells in 0.1ml,Immunofluorescence: 0.5-1 µg/mL,Immunohistochemistry (FFPE): 0.25-0.5 µg/mL for 30 min at RT (1),Prediluted format: incubate for 30 min at RT (2)
Restrictions:	For Research Use only

Handling

Concentration:	0.2 mg/mL
Buffer:	0.2 mg/mL in 1X PBS with 0.1 mg/mL BSA (US sourced) and 0.05 % sodium azide

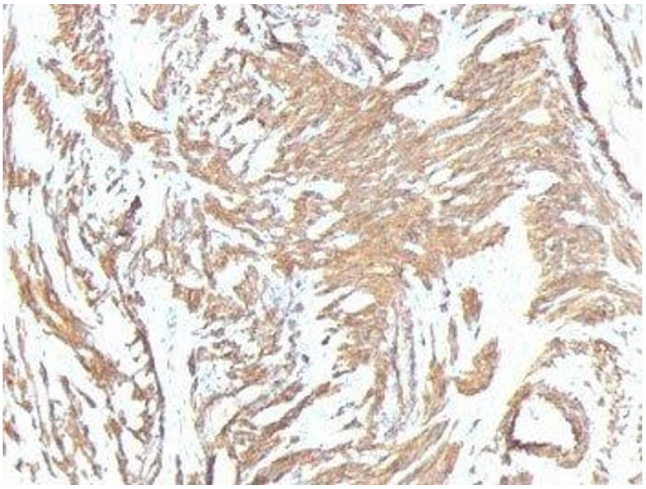
Handling

Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store the ACTA2 antibody cocktail at 2-8°C (with azide) or aliquot and store at -20°C or colder (without azide).

Images

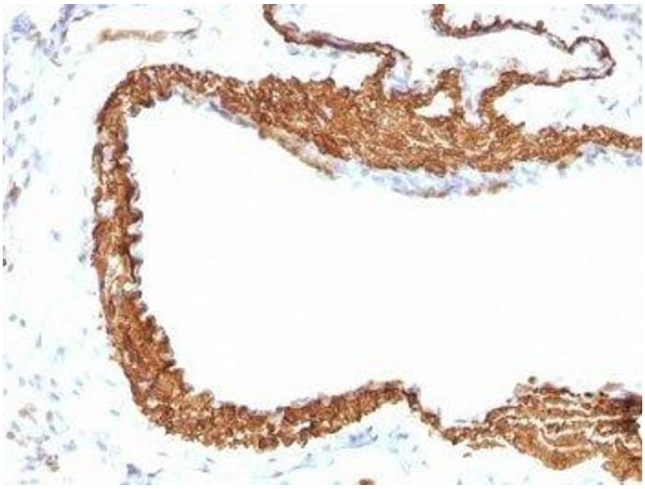
Immunohistochemistry

Image 1. Formalin-fixed, paraffin-embedded rat stomach stained with ACTA2 antibody.



Immunohistochemistry

Image 2. Formalin-fixed, paraffin-embedded human Leiomyosarcoma stained with ACTA2 antibody.



Immunohistochemistry

Image 3. Formalin-fixed, paraffin-embedded rat lung stained with ACTA2 antibody (1A4 + ACTA2/791).