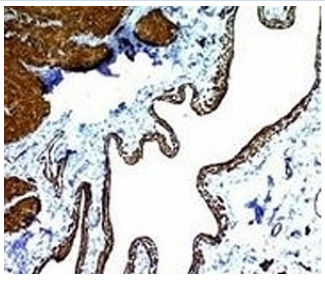
Alpha Smooth Muscle Actin Antibody [clone ACTA2/791] (V2837)

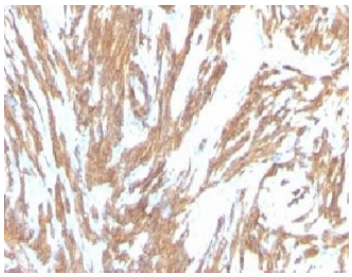
Catalog No.	Formulation	Size
V2837-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2837-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2837SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2837IHC-7ML	Prediluted 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

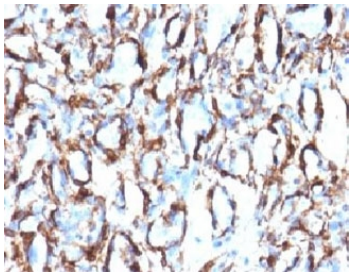
Availability	1-3 business days
Species Reactivity	Human, Rat
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	ACTA2/791
Purity	Protein G affinity chromatography
UniProt	P62736
Localization	Cytoplasmic
Applications	Immunofluorescence : 1-2ug/ml Immunohistochemistry (FFPE) : 0.25-0.5ug/ml for 30 min at RT
Limitations	This Alpha Smooth Muscle Actin antibody is available for research use only.



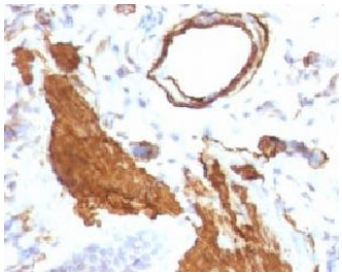
IHC: Formalin-fixed, paraffin-embedded human colon carcinoma stained with alpha Smooth Muscle Actin antibody (clone ACTA2/791).



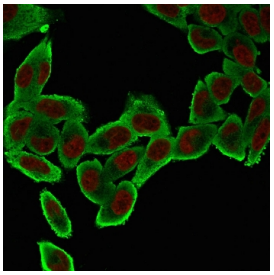
IHC: Formalin-fixed, paraffin-embedded human Leiomyosarcoma stained with alpha Smooth Muscle Actin antibody (clone ACTA2/791).



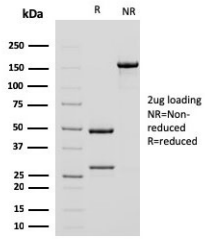
IHC: Formalin-fixed, paraffin-embedded human angiosarcoma stained with alpha Smooth Muscle Actin antibody (clone ACTA2/791).



IHC: Formalin-fixed, paraffin-embedded rat lung stained with alpha Smooth Muscle Actin antibody (clone ACTA2/791).



Immunofluorescent staining of permeabilized human HeLa cells with Alpha Smooth Muscle Actin antibody (green, clone ACTA2/791) and Reddot nuclear stain (red).



SDS-PAGE analysis of purified, BSA-free Alpha Smooth Muscle Actin antibody antibody (clone ACTA2/791) as confirmation of integrity and purity.

Description

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.

Application Notes

Optimal dilution of the Alpha Smooth Muscle Actin antibody 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 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 full-length human protein was used as the immunogen for the Alpha Smooth Muscle Actin antibody.

Storage

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