Actin, Smooth Muscle (Leiomyosarcoma Marker) Antibody

Mouse Monoclonal Antibody [Clone 1A4 + ACTA2/791]

Catalog No	Format	Size
59-MSM3-P0	Purified Ab with BSA and Azide	200ug/ml
59-MSM3-P1	Purified Ab with BSA and Azide	200ug/ml
59-MSM3-P1ABX	Purified Ab WITHOUT BSA and Azide	1.0mg/ml

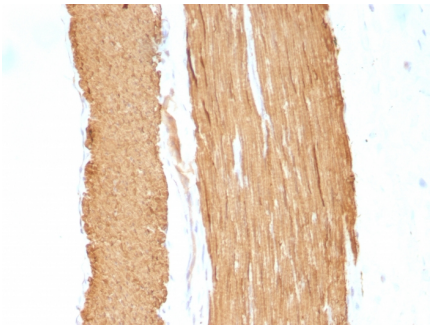
Applications	Tested Dillution
Flow Cytometry (Flow)	1-2ug/million cells
Immunofluorescence (IF)	1-3ug/ml
Immunohistochemistry (IHC)	1-2ug/ml

Product Details

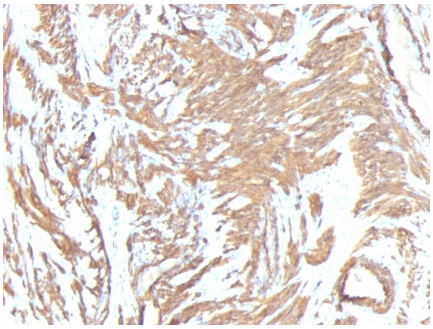
Clone	1A4 + ACTA2/791
Gene Name	ACTA2
Immunogen	N-Terminal decapeptide of alpha smooth muscle isoform of actin and conjugated to KLH (1A4); Recombinant full-length human ACTA2 protein (ACTA2/791)
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2a / Kappa
Mol. Weight of Antigen	42kDa
Cellular Localization	Cytoplasm, Cytoskeleton
Species Reactivity	Human, Rat
Positive Control	Blood vessels in all tissues, smooth muscle or leiomyosarcoma.

**Optimal dilution for a specific application should be determined.*

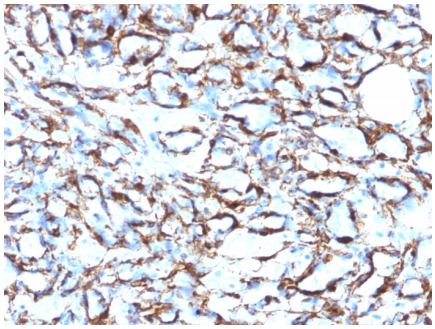
Product Images for Actin, Smooth Muscle (Leiomyosarcoma Marker) Antibody



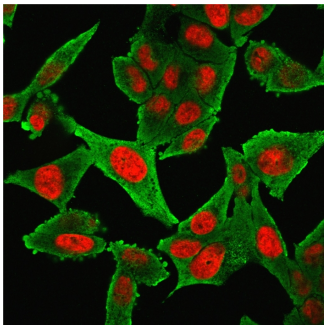
Formalin-fixed, paraffin-embedded Rat Stomach stained with Smooth Muscle Actin Monoclonal Antibody (1A4 + ACTA2/791).



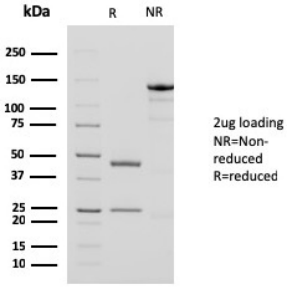
Formalin-fixed, paraffin-embedded human Leiomyosarcoma stained with Smooth Muscle Actin Monoclonal Antibody (1A4 + ACTA2/791).



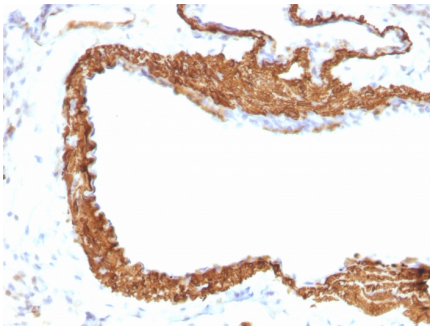
Formalin-fixed, paraffin-embedded human Angiosarcoma stained with Smooth Muscle Actin MAb (1A4 + ACTA2/791).



Immunofluorescence Analysis of HeLa cells labeling Smooth Muscle Actin with Smooth Muscle Actin MAb (1A4 + ACTA2/791) followed by Goat anti-Mouse IgG-CF488(Green). The nuclear counterstain is NucSpot (Red).



SDS-PAGE Analysis Purified Smooth Muscle Actin MAb (1A4 + ACTA2/791). Confirmation of Integrity and Purity of Antibody.



Formalin-fixed, paraffin-embedded Rat Lung stained with Smooth Muscle Actin Monoclonal Antibody (1A4 + ACTA2/791).

Specificity & Comments

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.

Research Areas

Cardiovascular, Mesenchymal Stem Cell Differentiation, Signal Transduction

Known Applications & Suggested Dilutions

Flow Cytometry (1-2ug/million cells) | ,Immunofluorescence (1-2ug/ml) | ,Immunohistochemistry (Formalin-fixed) (0.25-0.5ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95&degC followed by cooling at RT for 20 minutes) | Optimal dilution for a specific application should be determined.

Supplied As

200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.

There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.