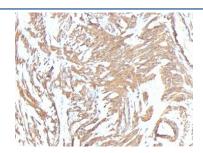


# ACTA2 Antibody Cocktail / Alpha Actin [clone 1A4 + ACTA2/791] (V2838)

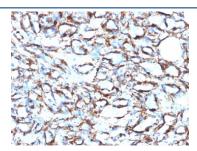
Catalog No.	Formulation	Size
V2838-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2838-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20
V2838SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100
V2838IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7

## **Bulk quote request**

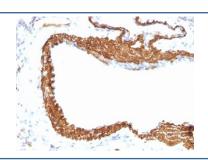
Availability	1-3 business days
Species Reactivity	Human, Rat
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	1A4 + ACTA2/791
Purity	Protein G affinity chromatography
UniProt	P62736
Localization	Cytoplasmic
Applications	Immunofluorescence : 1-2ug/ml Immunohistochemistry (FFPE) : 0.25-0.5ug/ml for 30 min at RT
Limitations	This ACTA2 antibody cocktail is available for research use only.



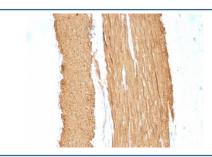
IHC: Formalin-fixed, paraffin-embedded human leiomyosarcoma stained with ACTA2 antibody cocktail (clone 1A4 + ACTA2/791).



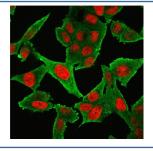
IHC: Formalin-fixed, paraffin-embedded human angiosarcoma stained with ACTA2 antibody cocktail (clone 1A4 + ACTA2/791).



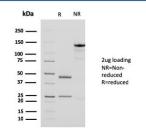
IHC: Formalin-fixed, paraffin-embedded rat lung stained with ACTA2 antibody cocktail (clone 1A4 + ACTA2/791).



IHC: Formalin-fixed, paraffin-embedded rat stomach stained with ACTA2 antibody cocktail (clone 1A4 + ACTA2/791).



Immunofluorescent staining of fixed human HeLa cells with ACTA2 antibody cocktail antibody (clone 1A4 + ACTA2/791, green) and NucSpot nuclear stain (red).



SDS-PAGE analysis of purified, BSA-free ACTA2 antibody cocktail antibody (clone 1A4 + 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 ACTA2 antibody cocktail 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**

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.

#### **Storage**

Store the ACTA2 antibody cocktail at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).