

# Product Datasheet

## **alpha-Smooth Muscle Actin Antibody (1A4 + ACTA2/791) - Azide and BSA Free NBP2-47699-0.1mg**

Unit Size: 0.1 mg

Store at -20 to -80C. Avoid freeze-thaw cycles.

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**NBP2-47699-0.1mg**

alpha-Smooth Muscle Actin Antibody (1A4 + ACTA2/791) - Azide and BSA Free

Product Information	
Unit Size	0.1 mg
Concentration	1.0 mg/ml
Storage	Store at -20 to -80C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	1A4 + ACTA2/791
Preservative	No Preservative
Isotype	IgG2a Kappa/IgG2a Kappa
Purity	Protein A or G purified
Buffer	10 mM PBS
Target Molecular Weight	42 kDa

Product Description	
Description	1.0 mg/ml of antibody purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS WITHOUT BSA & azide. Also available at 200 ug/ml WITH BSA & azide (NBP2-44464).  Antibody with azide - store at 2 to 8C. Antibody without azide - store at -20 to -80C.
Host	Mouse
Gene ID	59
Gene Symbol	ACTA2
Species	Human, Rat
Reactivity Notes	Predicted to show a broad reactivity.
Marker	Leiomyosarcoma Marker
Specificity/Sensitivity	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 monoclonal antibody 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.
Immunogen	N-Terminal decapeptide of alpha-Smooth Muscle Actin and conjugated to KLH (1A4); Recombinant full-length human ACTA2 protein (ACTA2/791) (Uniprot: P62736)

Product Application Details	
Applications	Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, CyTOF-ready, Immunofluorescence
Recommended Dilutions	Flow Cytometry 0.5 - 1 ug/million cells in 0.1 ml, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry-Paraffin 0.25 - 0.5 ug/ml, Immunofluorescence 0.5 - 1.0 ug/ml, CyTOF-ready

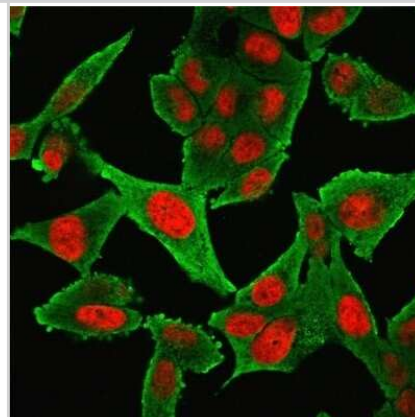


**Application Notes**

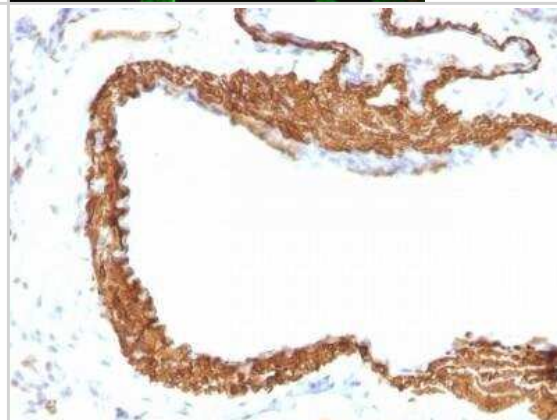
Immunohistochemistry (Formalin-fixed): 0.25-0.5ug/ml for 30 minutes at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95C followed by cooling at RT for 20 minutes.  
Optimal dilution for a specific application should be determined.

**Images**

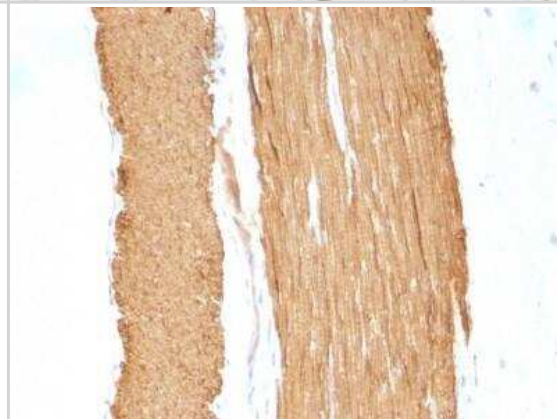
Immunocytochemistry/Immunofluorescence: alpha-Smooth Muscle Actin Antibody (1A4 + ACTA2/791) - Azide and BSA Free [NBP2-47699] - Immunofluorescence Analysis of HeLa cells labeling Smooth Muscle Actin with alpha-Smooth Muscle Actin Antibody (1A4 + ACTA2/791) followed by Goat anti-Mouse IgG-CF488(Green). The nuclear counterstain is NucSpot (Red).



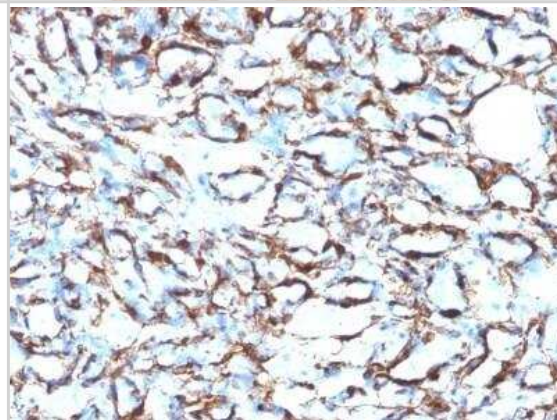
Immunohistochemistry-Paraffin: alpha-Smooth Muscle Actin Antibody (1A4 + ACTA2/791) [NBP2-47699] - Azide and BSA Free [NBP2-47699] - Paraffin-embedded Rat Lung stained with alpha-Smooth Muscle Actin Monoclonal Antibody (1A4 + ACTA2/791).



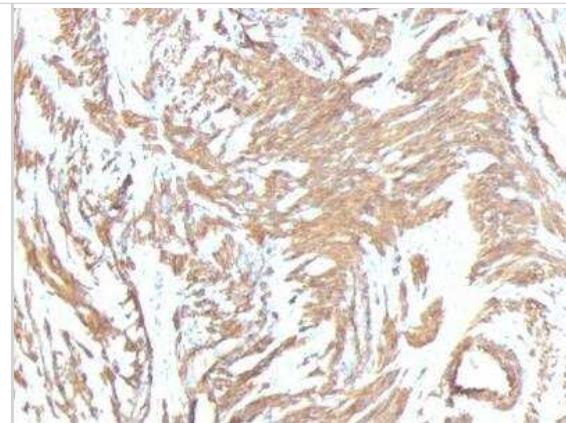
Immunohistochemistry-Paraffin: alpha-Smooth Muscle Actin Antibody (1A4 + ACTA2/791) [NBP2-47699] - Azide and BSA Free [NBP2-47699] - Paraffin-embedded Rat Stomach stained with alpha-Smooth Muscle Actin Monoclonal Antibody (1A4 + ACTA2/791).



Immunohistochemistry-Paraffin: alpha-Smooth Muscle Actin Antibody (1A4 + ACTA2/791) [NBP2-47699] - Azide and BSA Free [NBP2-47699] - Paraffin-embedded Human Angiosarcoma stained with alpha-Smooth Muscle Actin Monoclonal Antibody (1A4 + ACTA2/791).



Immunohistochemistry-Paraffin: alpha-Smooth Muscle Actin Antibody (1A4 + ACTA2/791) [NBP2-47699] - Azide and BSA Free [NBP2-47699]  
- Paraffin-embedded Human Leiomyosarcoma stained with alpha-Smooth Muscle Actin Monoclonal Antibody (1A4 + ACTA2/791).





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### **Products Related to NBP2-47699-0.1mg**

HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
H00000059-P01-10ug	Recombinant Human alpha-Smooth Muscle Actin GST (N-Term) Protein
233-FB-025	FGF basic/FGF2/bFGF [Unconjugated]

### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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