

# Product Datasheet

## alpha-Smooth Muscle Actin Antibody (ACTA2/791) - Azide and BSA Free

### NBP2-47698-0.1mg

Unit Size: 0.1 mg

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

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**NBP2-47698-0.1mg**

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

**Product Information**

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

**Product Description**

<b>Description</b>	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 (NBP2-44463).  Antibody with azide - store at 2 to 8C. Antibody without azide - store at -20 to -80C.
<b>Host</b>	Mouse
<b>Gene ID</b>	59
<b>Gene Symbol</b>	ACTA2
<b>Species</b>	Human, Rat
<b>Reactivity Notes</b>	Predicted to show a broad reactivity.
<b>Marker</b>	Leiomyosarcoma Marker
<b>Specificity/Sensitivity</b>	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.
<b>Immunogen</b>	Recombinant full-length human alpha-Smooth Muscle Actin protein (Uniprot: P62736)

**Product Application Details**

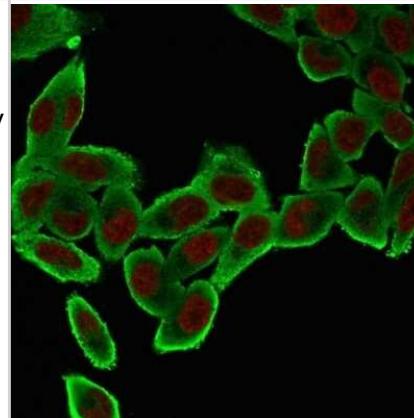
<b>Applications</b>	Flow Cytometry, Flow (Intracellular), Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, CyTOF-ready, Immunofluorescence
<b>Recommended Dilutions</b>	Flow Cytometry 0.5 - 1 ug/million cells in 0.1 ml, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry-Paraffin 0.25 - 0.5 ug/ml, Flow (Intracellular), Immunofluorescence 0.5 - 1.0 ug/ml, CyTOF-ready

**Application Notes**

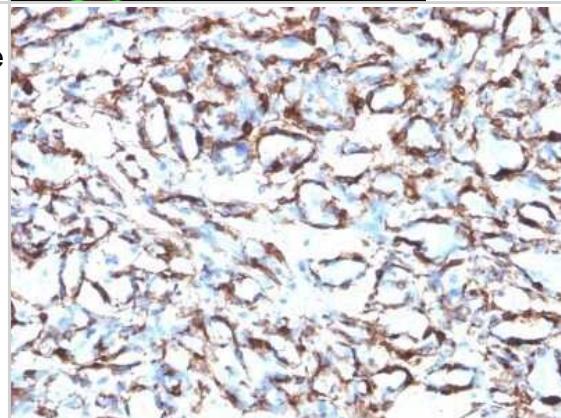
Immunohistochemistry (Formalin-fixed): 0.25-0.5ug/ml for 30 minutes at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95C followed by cooling at RT for 20 minutes. Optimal dilution for a specific application should be determined. Use in Immunocytochemistry/immunofluorescence reported in scientific literature (PMID: 29383981).

**Images**

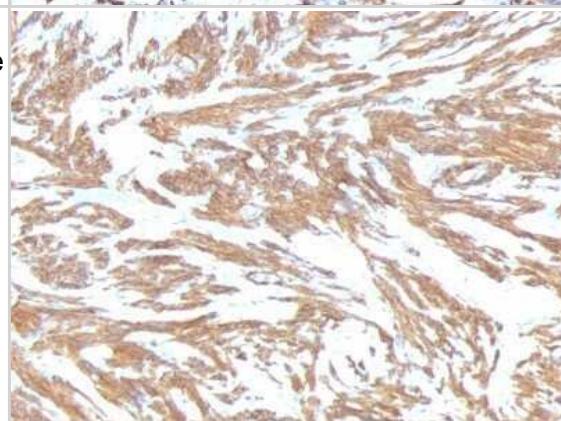
Immunocytochemistry/Immunofluorescence: alpha-Smooth Muscle Actin Antibody (ACTA2/791) - Azide and BSA Free [NBP2-47698] - Immunofluorescence Analysis of HeLa cells labeling Smooth Muscle Actin with alpha-Smooth Muscle Actin Antibody (ACTA2/791) followed by Goat anti-Mouse IgG-CF488(Green). The nuclear counterstain is NucSpot (Red).



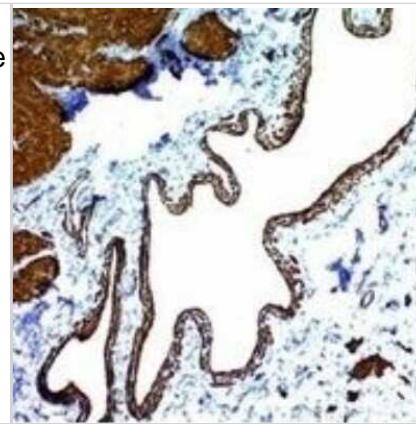
Immunohistochemistry-Paraffin: alpha-Smooth Muscle Actin Antibody (ACTA2/791) - Azide and BSA Free [NBP2-47698] - Azide and BSA Free [NBP2-47698] - Paraffin-embedded Human Angiosarcoma stained with alpha-Smooth Muscle Actin Monoclonal Antibody (ACTA2/791).



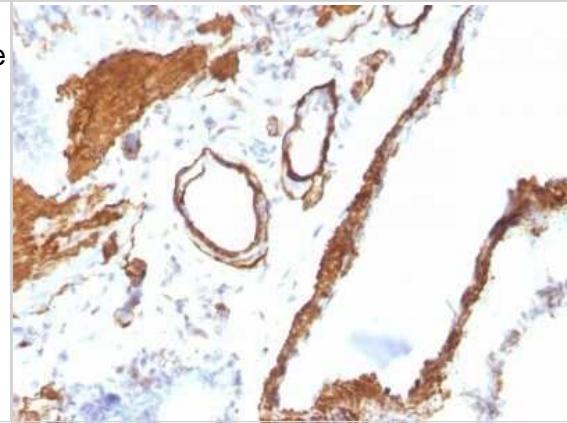
Immunohistochemistry-Paraffin: alpha-Smooth Muscle Actin Antibody (ACTA2/791) - Azide and BSA Free [NBP2-47698] - Azide and BSA Free [NBP2-47698] - Paraffin-embedded Human Leiomyosarcoma stained with alpha-Smooth Muscle Actin Monoclonal Antibody (ACTA2/791).



Immunohistochemistry-Paraffin: alpha-Smooth Muscle Actin Antibody (ACTA2/791) - Azide and BSA Free [NBP2-47698] - Azide and BSA Free [NBP2-47698] - Paraffin-embedded Human Leiomyosarcoma stained with alpha-Smooth Muscle Actin Monoclonal Antibody (ACTA2/791).



Immunohistochemistry-Paraffin: alpha-Smooth Muscle Actin Antibody (ACTA2/791) - Azide and BSA Free [NBP2-47698] - Azide and BSA Free [NBP2-47698] - Paraffin-embedded Rat Lung stained with alpha-Smooth Muscle Actin Monoclonal Antibody (ACTA2/791).



## Publications

Ulrich ND, Shen YC, Ma Q Et al. Cellular heterogeneity of human fallopian tubes in normal and hydrosalpinx disease states identified using scRNA-seq Dev Cell 2022-03-23 [PMID: 35320732]

### Details:

Citation using the Azide and BSA Free version of this antibody.



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## Products Related to NBP2-47698-0.1mg

HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-96981-0.5mg	Mouse IgG2a Kappa Isotype Control (M2AK)
H00000059-P01-10ug	Recombinant Human alpha-Smooth Muscle Actin GST (N-Term) Protein

## 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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