

Product Datasheet

alpha-Smooth Muscle Actin Antibody (ACTA2/791) NBP2-44463-0.1mg

Unit Size: 0.1 mg

Store at 4C.

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NBP2-44463-0.1mg

alpha-Smooth Muscle Actin Antibody (ACTA2/791)

Product Information	
Unit Size	0.1 mg
Concentration	0.2 mg/ml
Storage	Store at 4C.
Clonality	Monoclonal
Clone	ACTA2/791
Preservative	0.05% Sodium Azide
Isotype	IgG2a Kappa
Purity	Protein A or G purified
Buffer	10 mM PBS with 0.05% BSA
Target Molecular Weight	42 kDa

Product Description	
Description	200ug/ml of antibody purified from Bioreactor Concentrate by Protein A or G. Prepared in 10 mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0 mg/ml. (NBP2-47698) 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	Recombinant full-length human alpha-Smooth Muscle Actin protein (Uniprot: P62736)

Product Application Details	
Applications	Flow Cytometry, Flow (Intracellular), Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Flow Cytometry 1-2 ug/million cells, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence 1-2 ug/ml, Immunohistochemistry-Paraffin 0.25-0.5 ug/ml, Flow (Intracellular)



Application Notes

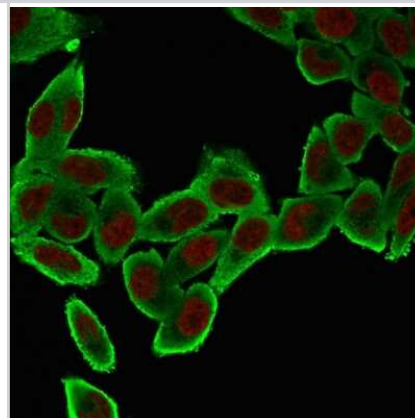
Immunohistochemistry (Formalin-fixed): 0.25-0.5ug/ml for 30 minutes at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95C followed by cooling at RT for 20 minutes.

Optimal dilution for a specific application should be determined.

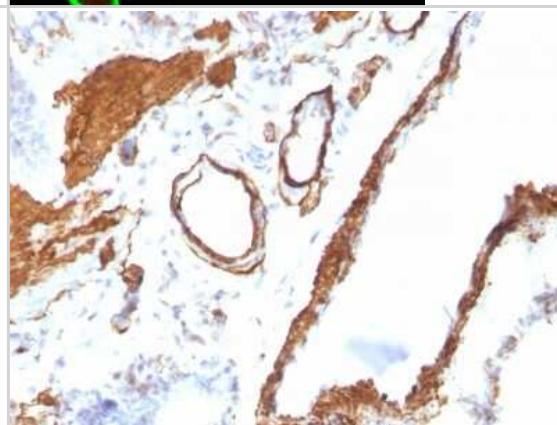
Use in Immunocytochemistry/immunofluorescence reported in scientific literature (PMID: 29383981).

Images

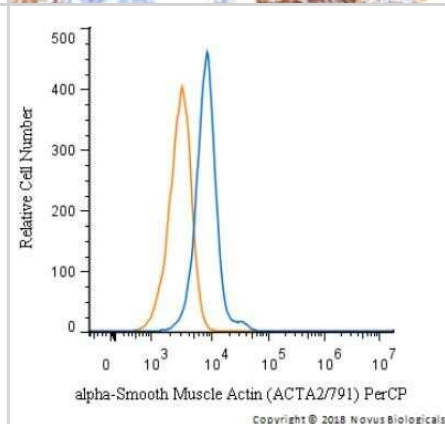
Immunocytochemistry/Immunofluorescence: alpha-Smooth Muscle Actin Antibody (ACTA2/791) [NBP2-44463] - Immunofluorescence Analysis of HeLa cells labeled with alpha-Smooth Muscle Actin Antibody (ACTA/791) followed by Goat anti-Mouse IgG-CF488(Green). The nuclear counterstain is NucSpot (Red).



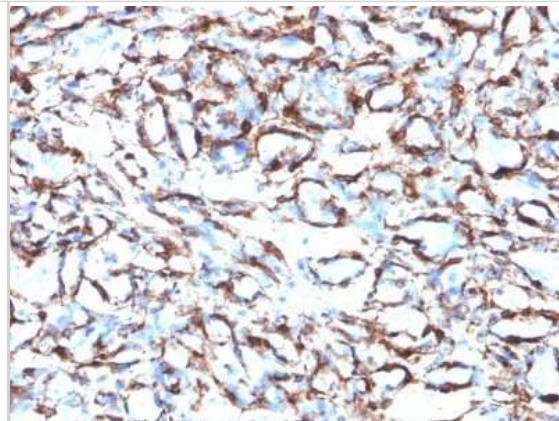
Immunohistochemistry-Paraffin: alpha-Smooth Muscle Actin Antibody (ACTA2/791) [NBP2-44463] - Rat Lung stained with alpha-Smooth Muscle Actin Monoclonal Antibody (ACTA2/791).



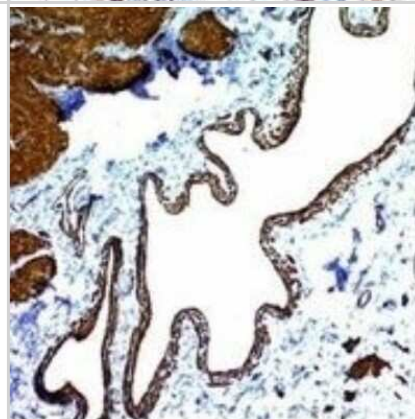
Flow (Intracellular): alpha-Smooth Muscle Actin Antibody (ACTA2/791) [NBP2-44463] - An intracellular stain was performed on HeLa cells with alpha-Smooth Muscle Actin Antibody (ACTA2/791) NBP2-47698PCP (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 10 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to PerCP.



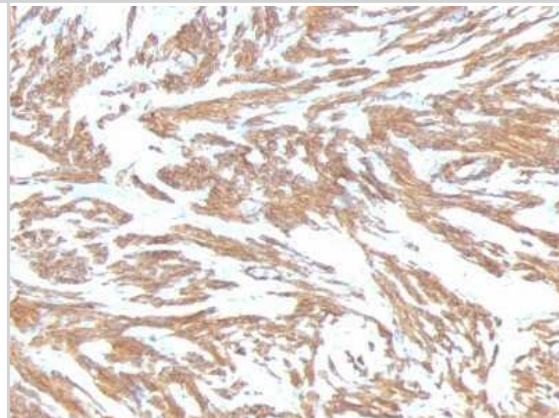
Immunohistochemistry-Paraffin: alpha-Smooth Muscle Actin Antibody (ACTA2/791) [NBP2-44463] - Human Angiosarcoma stained with alpha-Smooth Muscle Actin Monoclonal Antibody (ACTA2/791).



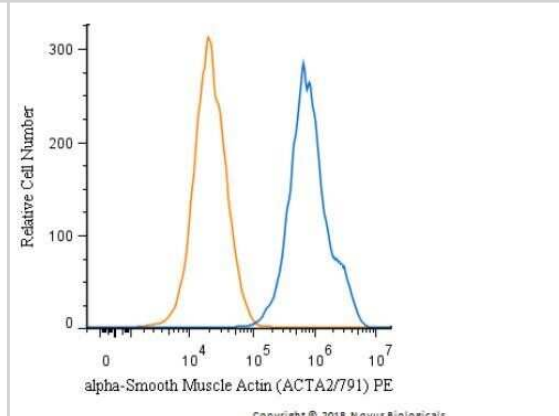
Immunohistochemistry-Paraffin: alpha-Smooth Muscle Actin Antibody (ACTA2/791) [NBP2-44463] - Human Colon Carcinoma stained with alpha-Smooth Muscle Actin Monoclonal Antibody (ACTA2/791).



Immunohistochemistry-Paraffin: alpha-Smooth Muscle Actin Antibody (ACTA2/791) [NBP2-44463] - Human Leiomyosarcoma stained with alpha-Smooth Muscle Actin Monoclonal Antibody (ACTA2/791).



Flow Cytometry: alpha-Smooth Muscle Actin Antibody (ACTA2/791) [NBP2-44463] - An intracellular stain was performed on HepG2 cells with alpha-Smooth Muscle Actin Antibody (ACTA2/791) NBP2-47698PE (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 5 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to phycoerythrin.



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.

Liu Y, Cromeens BP, Wang Y, Fisher K. Comparison of Different in vivo Incubation Sites to Produce Tissue Engineered Small Intestine. Tissue Eng Part A. 2018-01-31 [PMID: 29383981] (ICC/IF, Rat)





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Products Related to NBP2-44463-0.1mg

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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