

For Research Use Only

Alpha smooth muscle actin specific Recombinant monoclonal antibody, PBS Only

Catalog Number: 80008-2-PBS



Basic Information

Catalog Number: 80008-2-PBS	GenBank Accession Number: NM_001613	Purification Method: Protein A purification
Size: 100ug , Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 59	CloneNo.: 250297G8
Source: Rabbit	UNIPROT ID: P62736	
Isotype: IgG	Full Name: actin, alpha 2, smooth muscle, aorta	
	Calculated MW: 42 kDa	
	Observed MW: 42 kDa	

Applications

Tested Applications:
WB, IHC, IF-P, Indirect ELISA

Species Specificity:
human, mouse, rat

Background Information

Alpha smooth muscle actin (α -SMA or ACTA2) is an actin isoform predominantly expressed in smooth muscle cells and is the most widely recognized marker for activated myofibroblasts. In healthy adult tissues, its expression is largely restricted to vascular and visceral smooth muscle. However, during tissue injury, fibrosis, or wound healing, fibroblasts differentiate into myofibroblasts with significant upregulation of α -SMA. Therefore, α -SMA serves as a critical immunohistochemical marker for detecting myofibroblast activation and studying pathological processes such as organ fibrosis (e.g., liver, kidney, lung) and cancer stroma remodeling.

Storage

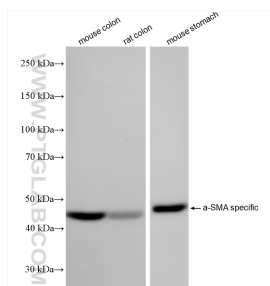
Storage:
Store at -80°C.

Storage Buffer:
PBS only, pH7.3

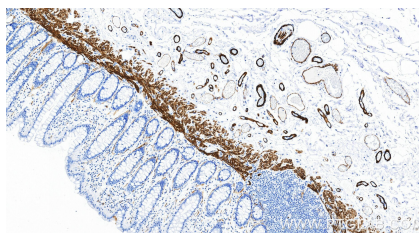
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

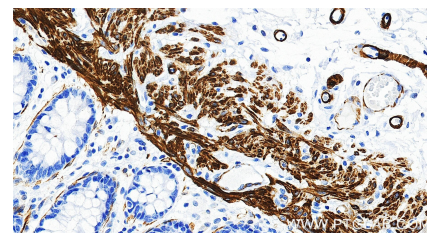
Selected Validation Data



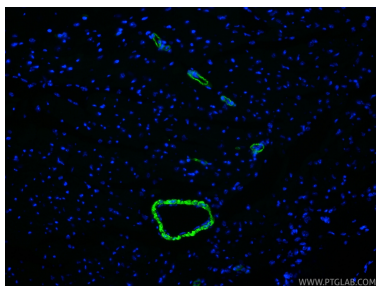
Various lysates were subjected to SDS PAGE followed by western blot with 80008-2-RR (a-SMA specific antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 80008-2-PBS in a different storage buffer formulation.



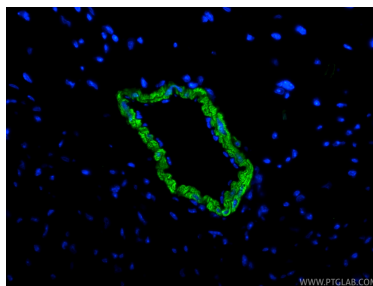
Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 80008-2-RR (a-SMA specific antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 80008-2-PBS in a different storage buffer formulation.



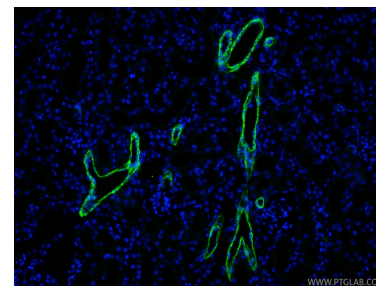
Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 80008-2-RR (a-SMA specific antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 80008-2-PBS in a different storage buffer formulation.



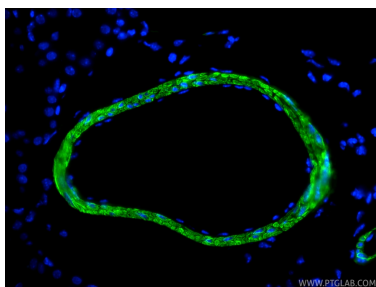
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse heart tissue using a-SMA specific antibody (80008-2-RR, Clone: 250297G8) at dilution of 1:2000 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 80008-2-PBS in a different storage buffer formulation.



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Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse kidney tissue using a-SMA specific antibody (80008-2-RR, Clone: 250297G8) at dilution of 1:2000 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 80008-2-PBS in a different storage buffer formulation.



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