

For Research Use Only

CoraLite® Plus 647-conjugated α -SMA specific Recombinant monoclonal antibody

Catalog Number: CL647-80008-2



Basic Information

Catalog Number: CL647-80008-2	GenBank Accession Number: NM_001613	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 ug/ml by Nanodrop;	GeneID (NCBI): 59	CloneNo.: 250297G8
Source: Rabbit	UNIPROT ID: P62736	Recommended Dilutions: IF-P: 1:50-1:500
Isotype: IgG	Full Name: actin, alpha 2, smooth muscle, aorta	Excitation/Emission maxima wavelengths: 654 nm / 674 nm
	Calculated MW: 42 kDa	

Applications

Tested Applications: IF-P	Positive Controls: IF-P : mouse heart tissue,
Species Specificity: human, mouse	

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 -20°C. Avoid exposure to light. Stable for one year after shipment.
Storage Buffer:
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3
Aliquoting is unnecessary for -20°C storage

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



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse heart tissue using CoraLite® Plus 647 α-SMA specific antibody (CL647-80008-2, Clone: 250297G8) at dilution of 1:200. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).