



Datasheet for ABIN2857027

anti-Smooth Muscle Actin antibody (N-Term)



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14 Images

9 Publications

Overview

Quantity:	100 µL
Target:	Smooth Muscle Actin (ACTA2)
Binding Specificity:	N-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Smooth Muscle Actin antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunocytochemistry (ICC), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	Carrier-protein conjugated synthetic peptide encompassing a sequence within the N-terminus region of human alpha Smooth Muscle Actin. The exact sequence is proprietary.
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat, Zebrafish (Danio rerio)
Characteristics:	Rabbit polyclonal antibody to alpha Smooth Muscle Actin alpha Smooth Muscle Actin antibody
Purification:	Purified by antigen-affinity chromatography.
Grade:	KO Validated

Target Details

Target:	Smooth Muscle Actin (ACTA2)
Alternative Name:	actin alpha 2, smooth muscle (ACTA2 Products)
Background:	<p>The protein encoded by this gene belongs to the actin family of proteins, which are highly conserved proteins that play a role in cell motility, structure and integrity. Alpha, beta and gamma actin isoforms have been identified, with alpha actins being a major constituent of the contractile apparatus, while beta and gamma actins are involved in the regulation of cell motility. This actin is an alpha actin that is found in skeletal muscle. Defects in this gene cause aortic aneurysm familial thoracic type 6. Multiple alternatively spliced variants, encoding the same protein, have been identified. [provided by RefSeq, Nov 2008]</p> <p>Cellular Localization: Cytoplasm , cytoskeleton</p>
Molecular Weight:	42 kDa
Gene ID:	59
UniProt:	P62736
Pathways:	Myometrial Relaxation and Contraction , Skeletal Muscle Fiber Development

Application Details

Application Notes:	WB: 1:500-1:3000. ICC/IF: 1:100-1:1000. IHC-P: 1:100-1:1000. Optimal dilutions/concentrations should be determined by the researcher. Not tested in other applications.
Comment:	Positive Control: Rat2 , C8D30 , NIH-3T3 , C2C12 Validation: KO/KD, Orthogonal
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1.37 mg/mL
Buffer:	1XPBS pH 7, 20 % Glycerol, 0.025 % ProClin 300
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

Storage: 4 °C,-20 °C

Storage Comment: Store as concentrated solution. Centrifuge briefly prior to opening vial. For short-term storage (1-2 weeks), store at 4°C. For long-term storage, aliquot and store at -20°C or below. Avoid multiple freeze-thaw cycles.

Publications

Product cited in: Chang, Hsieh, Lu, Chen, Liang, Lin, Hung, Liou, Wu: "Therapeutic Targeting of Aristolochic Acid Induced Uremic Toxin Retention, SMAD 2/3 and JNK/ERK Pathways in Tubulointerstitial Fibrosis: Nephroprotective Role of Propolis in Chronic Kidney Disease." in: **Toxins**, Vol. 12, Issue 6, (2020) ([PubMed](#)).

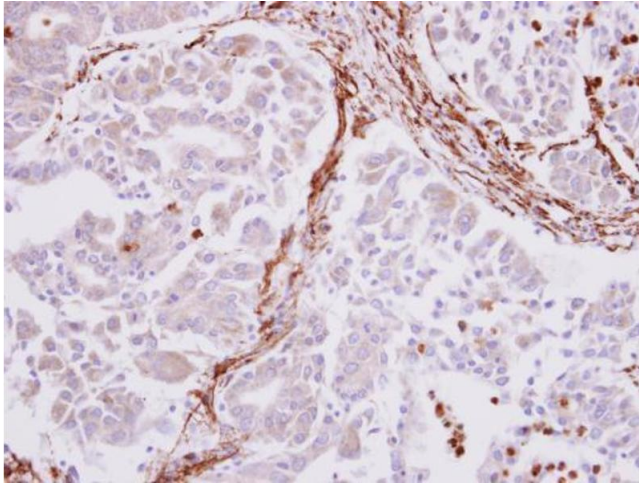
Wang, Giusti, Ny, de Witte: "Nephrotoxic Effects in Zebrafish after Prolonged Exposure to Aristolochic Acid." in: **Toxins**, Vol. 12, Issue 4, (2020) ([PubMed](#)).

Sun, Lei, Huang et al.: "SOX18 Affects Cell Viability, Migration, Invasiveness, and Apoptosis in Hepatocellular Carcinoma (HCC) Cells by Participating in Epithelial-to-Mesenchymal Transition (EMT) Progression and Adenosine ..." in: **Medical science monitor : international medical journal of experimental and clinical research**, Vol. 25, pp. 6244-6254, (2020) ([PubMed](#)).

Stone, Stainier: "Paraxial Mesoderm Is the Major Source of Lymphatic Endothelium." in: **Developmental cell**, Vol. 50, Issue 2, pp. 247-255.e3, (2020) ([PubMed](#)).

Yeh, Chen, Liao, Wu, Huang, Lin: "The Bioactive Core and Corona Synergism of Quantized Gold Enables Slowed Inflammation and Increased Tissue Regeneration in Wound Hypoxia." in: **International journal of molecular sciences**, Vol. 21, Issue 5, (2020) ([PubMed](#)).

There are more publications referencing this product on: [Product page](#)



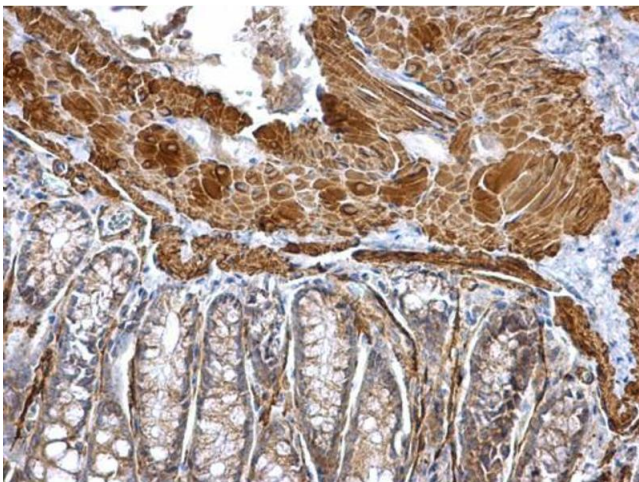
Immunohistochemistry

Image 1. IHC-P Image alpha smooth muscle Actin antibody detects alpha smooth muscle Actin protein at cytoplasm on human liver carcinoma stroma by immunohistochemical analysis. Sample: Paraffin-embedded liver carcinoma stroma. alpha smooth muscle Actin antibody , d



Immunofluorescence

Image 2. ICC/IF Image Immunofluorescence analysis of paraformaldehyde-fixed mouse ESC D3, using alpha Actin (smooth muscle), antibody at 1:200 dilution.



Immunohistochemistry

Image 3. IHC-P Image alpha smooth muscle Actin antibody detects alpha smooth muscle Actin protein at cytosol on mouse colon by immunohistochemical analysis. Sample: Paraffin-embedded mouse colon. alpha smooth muscle Actin antibody , dilution: 1:500.

Please check the [product details page](#) for more images. Overall 14 images are available for ABIN2857027.