

Catalog #: 68172

Aliases

ACTA2; Actin Alpha 2, Smooth Muscle; ACTSA; Cell Growth-Inhibiting Gene 46 Protein; Actin, Alpha 2, Smooth Muscle, Aorta; Actin, Aortic Smooth Muscle; Alpha-Cardiac Actin; Alpha-

Actin-2; EC 3.6.4.-; ACTVS; α-SMA; alpha smooth muscle Actin; a SMA

Background

Gene Name: ACTA2 NCBI Gene Entry: 59 UniProt Entry: P62736

Application Information

Molecular Weight: Predicted, 42 kDa, observed, 42 kDa

Clonality: Rabbit monoclonal antibody

Clone ID: 23GB600

Species Reactivity: Human, mouse, rat

Applications Tested: Western blotting (WB), flow cytometry (FCM), immunocytochemistry (IC),

immunohistochemistry (IHC)

Immunogen

A synthesized peptide derived from human alpha smooth muscle Actin

Isotype

Rabbit IgG

Storage Buffer

Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.

Storage

Store at -20 °C for one year.

Recommended Dilutions

Western Blotting (WB): 1:2,000-1:10,000

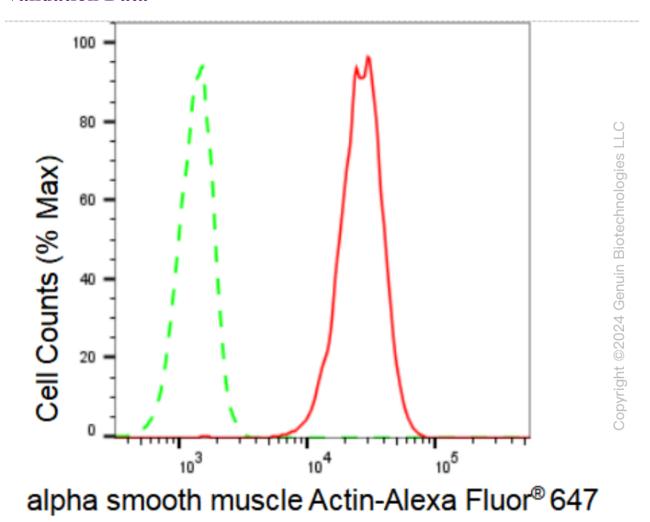
Flow Cytometry (FCM): 1:2,000

Immunocytochemistry (IC): 1:100-1:1,000 Immunohistochemistry (IHC): 1:100-1:200

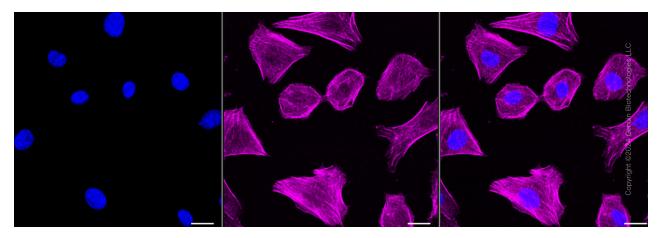
TEL: +1-540-855-7041

Note: This product is for research use only.

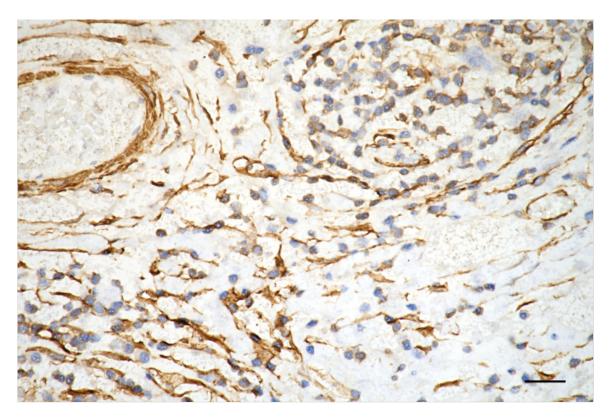
Validation Data



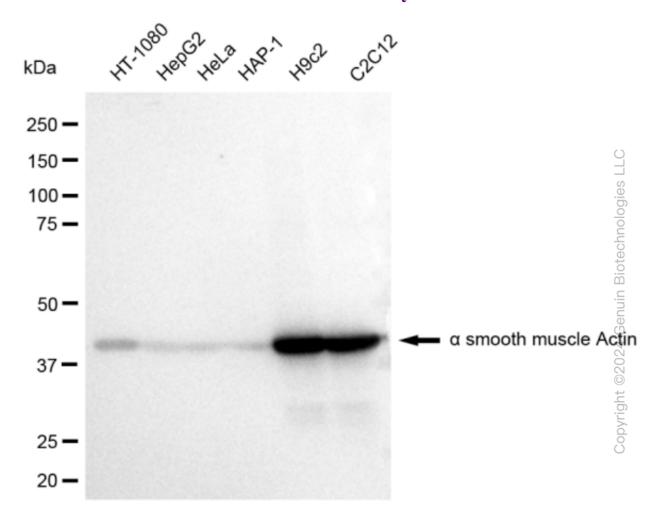
Flow cytometric analysis of alpha smooth muscle Actin expression in C2C12 cells using alpha smooth muscle Actin antibody (Cat#68172, 1:2,000). Green, isotype control; red, alpha smooth muscle Actin.



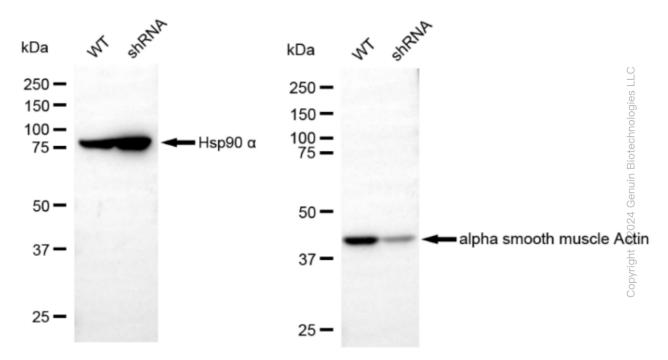
Immunocytochemical staining of C2C12 cells with alpha smooth muscle Actin antibody (Cat#68172, 1:1,000). Nuclei were stained blue with DAPI; alpha smooth muscle Actin was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 μm.



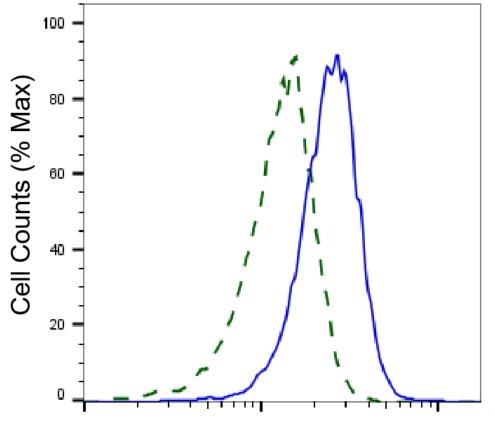
Immunohistochemistry was performed on paraffin-embedded human sigmoid colon carcinoma using anti-alpha smooth muscle actin antibody (Cat#68172, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 μm.



Western blotting analysis using anti-alpha smooth muscle Actin antibody (Cat#68172). Total cell lysates (30 μg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-alpha smooth muscle Actin1 antibody (Cat#68172, 1:10,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:50,000) respectively. Image was developed using FeQTM ECL Substrate Kit (Cat#226).



Western blotting analysis using anti-alpha smooth muscle Actin antibody (Cat#68172). alpha smooth muscle Actin antibody expression in wild type (WT) and alpha smooth muscle Actin antibody shRNA knockdown (KD) HeLa cells with 30 μg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-alpha smooth muscle Actin antibody (Cat#68172, 1:10,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using FeQTM ECL Substrate Kit (Cat#226).



alpha smooth muscle Actin-Alexa Fluor® 647

Validation of alpha smooth muscle Actin knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with anti-alpha smooth muscle Actin antibody (Cat#68172, 1:2,000) and analyzed using BD flow cytometer.