

Catalog #: 61532

Aliases

SMC1A; Structural Maintenance Of Chromosomes 1A; DXS423E; SB1.8; KIAA0178; SMC1L1; Smcb; SMC1 (Structural Maintenance Of Chromosomes 1, Yeast)-Like 1; Structural Maintenance Of Chromosomes Protein 1A; SMC Protein 1A; SMC-1-Alpha; SMC1; SMC1 Structural Maintenance Of Chromosomes 1-Like 1 (Yeast); Epididymis Secretory Sperm Binding Protein; Segregation Of Mitotic Chromosomes 1; SMC1alpha; EIEE85; SMC-1A; CDLS2; DEE85; Sb1.8

Background

Gene Name: SMC1A NCBI Gene Entry: 8243 UniProt Entry: Q14683

Application Information

Molecular Weight: Predicted, 143 kDa; observed, 143 kDa

Clonality: Rabbit monoclonal antibody

Clone ID: 25GB2670

Species Reactivity: Human, mouse, rat

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

Immunogen

A synthesized peptide derived from human SMC1

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

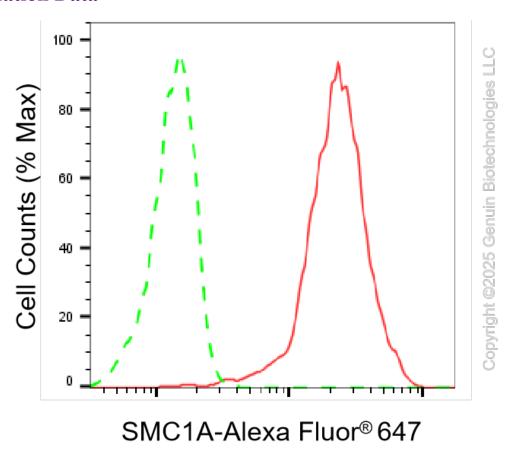
Western Blotting (WB): 1:1,000-1:5,000

Flow Cytometry (FCM): 1:2,000

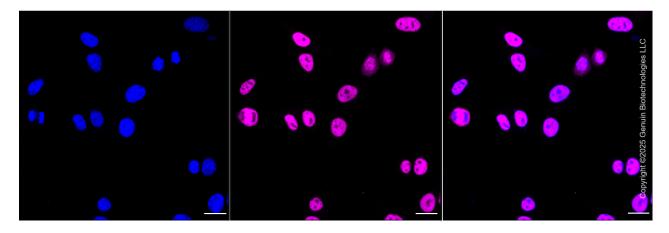
Immunocytochemistry (IC): 1:100-1:1,000

Note: This product is for research use only.

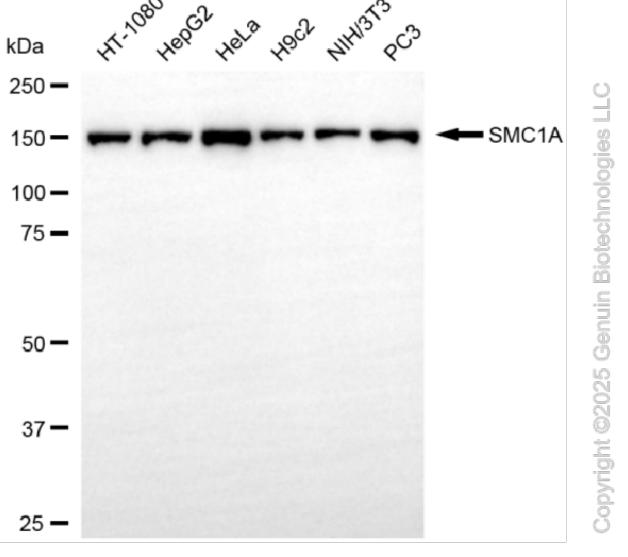
Validation Data



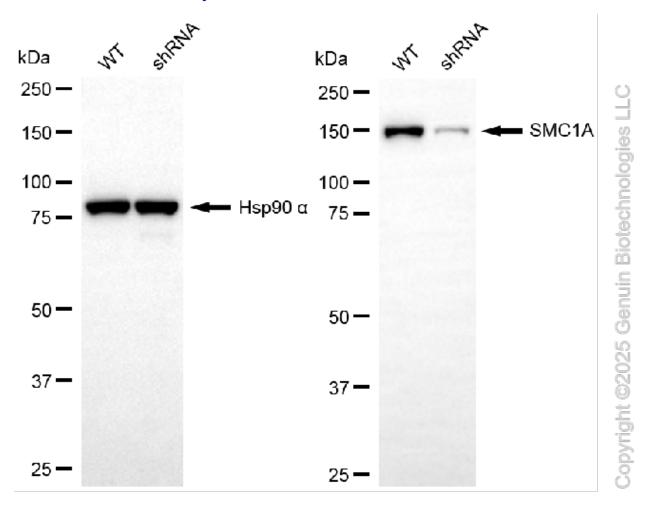
Flow cytometric analysis of SMC1A expression in HepG2 cells using anti-SMC1A antibody (Cat#61532, 1:2,000). Green, isotype control; red, SMC1A.



Immunocytochemical staining of HepG2 cells with anti-SMC1A antibody (Cat#61532, 1:1,000). Nuclei were stained blue with DAPI; SMC1A 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, $20~\mu m$.

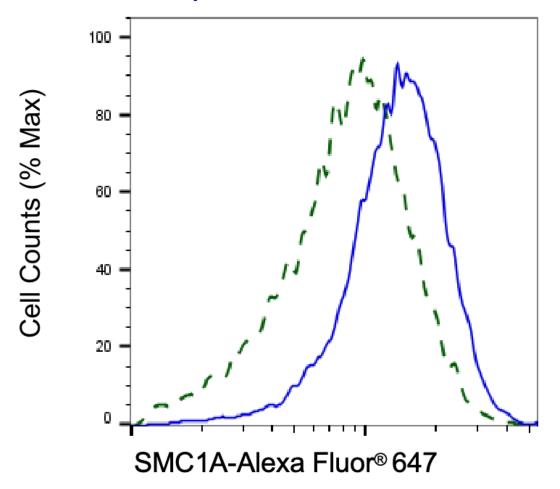


Western blotting analysis using anti-SMC1A antibody (Cat#61532). Total cell lysates (30 μg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-SMC1A antibody (Cat#61532, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using FeQTM ECL Substrate Kit (Cat#226).

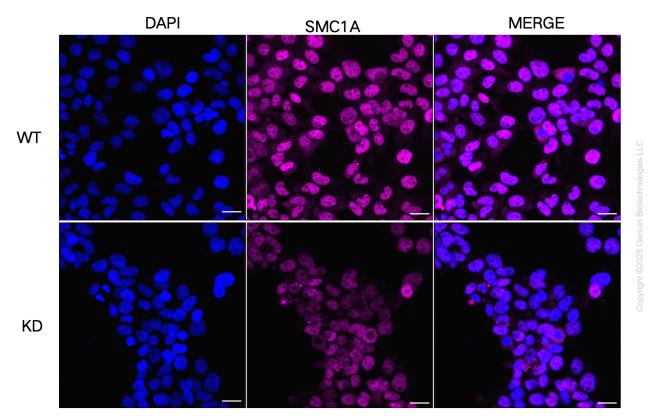


Western blotting analysis using anti-SMC1A antibody (Cat#61532). SMC1A expression in wild-type (WT) and SMC1A shRNA knockdown (KD) HeLa cells with 20 μg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-SMC1A antibody (Cat#61532, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using NaQTM ECL Substrate Kit (Cat#716).





Validation of SMC1A knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with anti-SMC1A antibody (Cat#61532, 1:2,000) and analyzed using BD flow cytometer.



Immunocytochemical staining of HeLa cells using anti-SMC1A antibody (Cat#61532, 1:1,000), Top panel: wild-type (WT); Bottom panal: SMC1A shRNA knockdown (KD). Nuclei were stained blue with DAPI; Acyl-CoA dehydrogenase short chain was stained magenta with Alexa Fluor® 647. Scale bar, 20 μm.

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