

Product Name: KD-Validated SMC4 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA00857**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 147.2kDa

Antigen Information

Gene Name	SMC4 SMC4; Structural Maintenance Of Chromosomes 4; HCAP-C; SMC4L1; CAP-C; Structural Maintenance Of Chromosomes Protein 4; Chromosome-Associated Polypeptide C; SMC
Alternative Names	Protein 4; SMC-4; CAPC; SMC4 (Structural Maintenance Of Chromosomes 4, Yeast)-Like 1; SMC4 Structural Maintenance Of Chromosomes 4-Like 1 (Yeast); SMC4 Structural Maintenance Of Chromosomes 4-Like 1; XCAP-C Homolog
Gene ID	10051.0
SwissProt ID	Q9NTJ3
Immunogen	A synthesized peptide derived from human SMC4

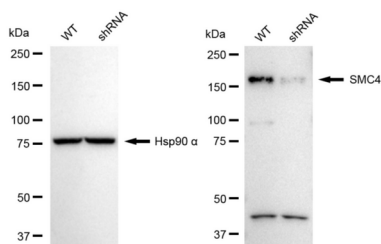
Background

This gene belongs to the 'structural maintenance of chromosomes' (SMC) gene family. Members of this gene family play a role in two changes in chromosome structure during mitotic segregation of chromosomes- chromosome condensation and sister chromatid cohesion. The protein encoded by this gene is likely a subunit of the 13S condensin complex, which is involved in chromosome condensation. A pseudogene related to this gene is located on chromosome 2. [provided by RefSeq, Jun 2016]

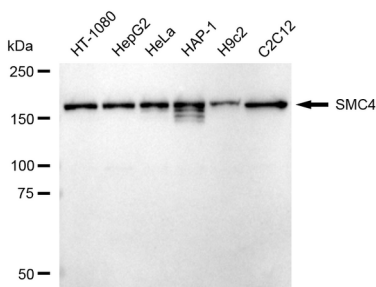
Research Area

Cell Biology, Epigenetics and Nuclear Signaling

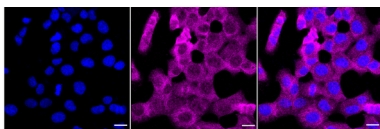
Image Data



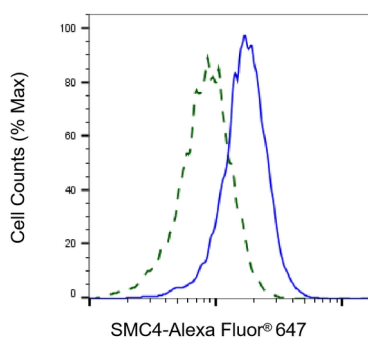
Western blotting analysis using SMC4 antibody (KVA00857). SMC4 expression in wild type (WT) and SMC4 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with SMC4 antibody (KVA00857, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



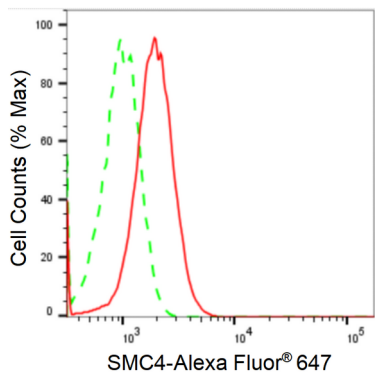
Western blotting analysis using SMC4 antibody (KVA00857). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with SMC4 antibody (KVA00857, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HT-1080 cells with SMC4 antibody (KVA00857, 1:1,000). Nuclei were stained blue with DAPI; SMC4 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.



Validation of SMC4 knockdown using flow cytometry. Wild-type (WT, Blue) and knockdown (KD, Green) HeLa cells were stained with SMC4 antibody (KVA00857, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of SMC4 expression in HT-1080 cells using SMC4 antibody (KVA00857, 1:2,000). Green, isotype control; red, SMC4.