

## Basic Information

<b>Product Name</b>	Anti-SMC6 Antibody	
<b>Gene Name</b>	SMC6	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human,rat	
<b>Tested Application</b>	WB, IHC, IF, ICC/IF, FCM, ELISA	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	E.coli-derived human SMC6 recombinant protein (Position: H499-D1018).	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	126 kDa	
<b>Dilution Ratios</b>	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunofluorescence (IF):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Flow Cytometry (Fixed):	1:50-200
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000
	(Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

## Background Information

Structural maintenance of chromosomes protein 6 is a protein that in humans is encoded by the SMC6 gene. Structural maintenance of chromosomes protein 6, also known as SMC6L1, is a protein that in humans is encoded by the SMC6 gene. It is involved in the Alternative lengthening of telomeres cancer mechanism. The International Radiation Hybrid Mapping Consortium mapped the SMC6L1 gene to chromosome 2.

## Selected Validation Data

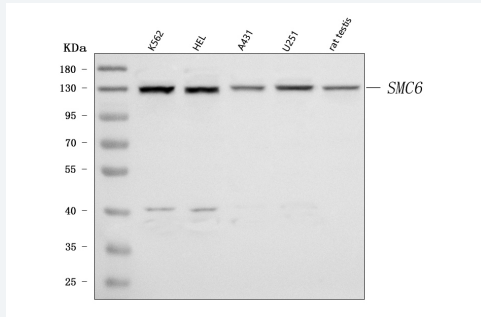


Figure 1. Western blot analysis of anti- SMC6 antibody (A01554-2). The sample well of each lane was loaded with 30ug of sample under reducing conditions.

Lane 1: human K562 whole cell lysates,

Lane 2: human HEL whole cell lysates,

Lane 3: human A431 whole cell lysates,

Lane 4: human U251 whole cell lysates,

Lane 5: rat testis tissue lysates.

Use rabbit anti- SMC6 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog#EK1002). A specific band was detected for SMC6 at approximately 130KD. The expected band size for SMC6 is at 126KD.

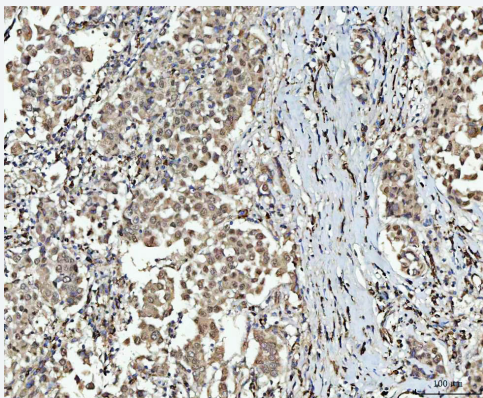


Figure 2. IHC analysis of SMC6 using anti-SMC6 antibody (A01554-2). SMC6 was detected in a paraffin-embedded section of human breast cancer tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1022) as the chromogen.

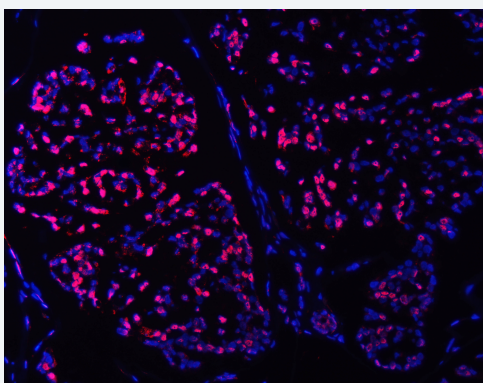


Figure 3. IF analysis of SMC6 using anti-SMC6 antibody (A01554-2). SMC6 was detected in a paraffin-embedded section of human breast cancer tissue. Cy3-conjugated Anti-rabbit IgG Secondary Antibody (red)(Catalog#BA1032) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).

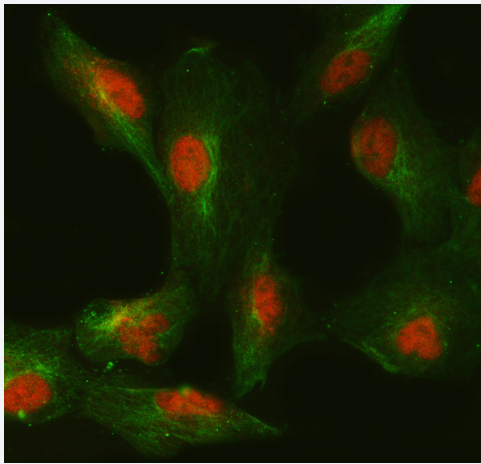


Figure 4. IF analysis of SMC6 using anti-SMC6 antibody (A01554-2) and anti-Beta Tubulin antibody (M05613-4). SMC6 was detected in an immunocytochemical section of A549 cells. The section was incubated with rabbit anti-SMC6 Antibody (A01554-2) at a dilution of 1:100. Cy3-conjugated Anti-rabbit IgG Secondary Antibody (red)(Catalog#BA1032) and Dylight488-conjugated Anti-mouse IgG Secondary Antibody (Green) (Catalog # BA1126) were used as secondary antibody.

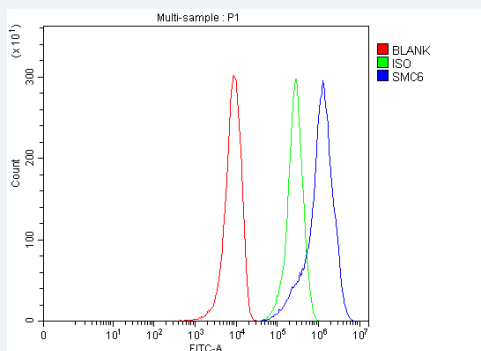


Figure 5. Flow Cytometry analysis of 293T cells using anti-SMC6 antibody (A01554-2). Overlay histogram showing 293T cells stained with A01554-2 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-SMC6 Antibody (A01554-2) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.