

## 35-1529: Polyclonal Antibody to SMC1 (Ab-957)

<b>Clonality :</b>	Polyclonal
<b>Application :</b>	WB,IHC
<b>Reactivity :</b>	Human
<b>Gene :</b>	SMC1A
<b>Gene ID :</b>	8243
<b>Uniprot ID :</b>	Q14683
<b>Format :</b>	Purified
<b>Alternative Name :</b>	SM1A, SMC1A, SMC1L1, SMC1 alpha protein
<b>Isotype :</b>	Rabbit IgG
<b>Immunogen Information :</b>	Peptide sequence around aa. 955~959 (G-S-S-Q-G) derived from Human SMC1.

### Description

Involved in chromosome cohesion during cell cycle and in DNA repair. Central component of cohesin complex. The cohesin complex is required for the cohesion of sister chromatids after DNA replication. The cohesin complex apparently forms a large proteinaceous ring within which sister chromatids can be trapped. At anaphase, the complex is cleaved and dissociates from chromatin, allowing sister chromatids to segregate. The cohesin complex may also play a role in spindle pole assembly during mitosis. Involved in DNA repair via its interaction with BRCA1 and its related phosphorylation by ATM, or via its phosphorylation by ATR. Works as a downstream effector both in the ATM/NBS1 branch and in the ATR/MSH2 branch of S-phase checkpoint.

### Product Info

<b>Amount :</b>	50 $\mu$ l / 100 $\mu$ l
<b>Content :</b>	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
<b>Storage condition :</b>	Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles.

### Application Note

Predicted MW: 145kd, Western blotting: 1:500~1:1000, Immunohistochemistry: 1:50~1:100

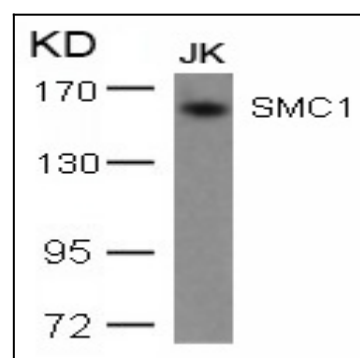


Figure 1: Western blot analysis of extracts from JK cells using SMC1(Ab-957) Antibody 35-1529 .

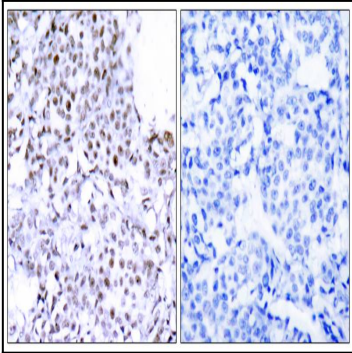


Figure 2: Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using SMC1(Ab-957) Antibody 35-1529 (left) or the same antibody preincubated with blocking peptide(right).