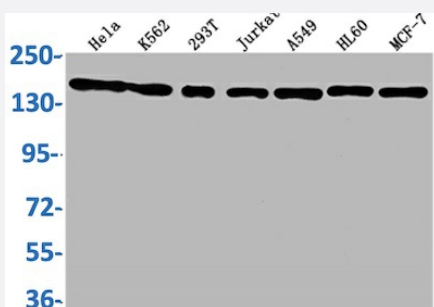


RecomAb™

# SMC1A recombinant monoclonal antibody, clone 8C11

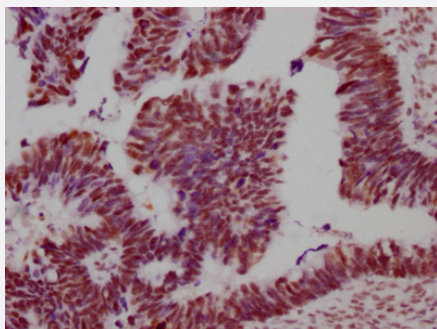
Catalog # RAB04013      Size 100 uL

## Applications



### Western Blot

Western Blot analysis of Lane 1: HeLa whole cell lysate; Lane 2: K562 whole cell lysate; Lane 3: 293T whole cell lysate; Lane 4: Jurkat whole cell lysate; Lane 5: A549 whole cell lysate; Lane 6: HL60 whole cell lysate; Lane 7: MCF-7 whole cell lysate.



### Immunohistochemistry

Immunohistochemistry image of SMC1A recombinant monoclonal antibody, clone 8C11 diluted at 1:100 and staining in paraffin-embedded human ovarian cancer performed on a Leica Bond™ system.

## Specification

Product Description	Rabbit recombinant monoclonal antibody raised against human SMC1A.
Antibody Species	Rabbit
Immunogen	Original antibody is raised against recombinant protein corresponding to full length human SMC1A.
Reactivity	Human
Form	Liquid
Purification	Affinity-chromatography

Isotype	IgG
Recommend Usage	ELISA Immunohistochemistry (1:50-1:200) Western Blot (1:500-1:5000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH7.4 (150mM NaCl, 50% glycerol and 0.02% sodium azide)
Storage Instruction	store at -20 °C or -80 °C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

## Applications

- Western Blot

Western Blot analysis of Lane 1: Hela whole cell lysate; Lane 2: K562 whole cell lysate; Lane 3: 293T whole cell lysate; Lane 4: Jurkat whole cell lysate; Lane 5: A549 whole cell lysate; Lane 6: HL60 whole cell lysate; Lane 7: MCF-7 whole cell lysate.

- Immunohistochemistry

Immunohistochemistry image of SMC1A recombinant monoclonal antibody, clone 8C11 diluted at 1:100 and staining in paraffin-embedded human ovarian cancer performed on a Leica Bond<sup>TM</sup> system.

- Enzyme-linked Immunoabsorbent Assay

## Gene Info — SMC1A

Entrez GeneID	<a href="#">8243</a>
Protein Accession#	<a href="#">Q14683</a>
Gene Name	SMC1A
Gene Alias	CDLS2, DKFZp686L19178, DXS423E, KIAA0178, MGC138332, SB1.8, SMC1, SMC1L1, SMC1alpha, SMCB
Gene Description	structural maintenance of chromosomes 1A
Omim ID	<a href="#">300040</a> <a href="#">300590</a>
Gene Ontology	<a href="#">Hyperlink</a>

**Gene Summary**

Proper cohesion of sister chromatids is a prerequisite for the correct segregation of chromosomes during cell division. The cohesin multiprotein complex is required for sister chromatid cohesion. This complex is composed partly of two structural maintenance of chromosomes (SMC) proteins, SMC3 and either SMC1L2 or the protein encoded by this gene. Most of the cohesin complexes dissociate from the chromosomes before mitosis, although those complexes at the kinetochore remain. Therefore, the encoded protein is thought to be an important part of functional kinetochores. In addition, this protein interacts with BRCA1 and is phosphorylated by ATM, indicating a potential role for this protein in DNA repair. This gene, which belongs to the SMC gene family, is located in an area of the X-chromosome that escapes X inactivation. [provided by RefSeq]

**Other Designations**

OTTHUMP00000061876|SMC1 (structural maintenance of chromosomes 1, yeast)-like 1|SMC1 structural maintenance of chromosomes 1-like 1|segregation of mitotic chromosomes 1

**Pathway**

- [Cell cycle](#)

**Disease**

- [De Lange Syndrome](#)