

**SMC4 Antibody (aa47-61)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS12108****Specification**

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**SMC4 Antibody (aa47-61) - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">O9NTJ3</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	147kDa KDa

**SMC4 Antibody (aa47-61) - Additional Information****Gene ID** 10051**Other Names**

Structural maintenance of chromosomes protein 4, SMC protein 4, SMC-4, Chromosome-associated polypeptide C, hCAP-C, XCAP-C homolog, SMC4, CAPC, SMC4L1

**Target/Specificity**

A synthetic peptide corresponding amino acid residues 47-61 of human CAP-C. Genbank accession number: BAA73535.

**Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

**Precautions**

SMC4 Antibody (aa47-61) is for research use only and not for use in diagnostic or therapeutic procedures.

**SMC4 Antibody (aa47-61) - Protein Information****Name** SMC4**Synonyms** CAPC, SMC4L1**Function**

Central component of the condensin complex, a complex required for conversion of interphase chromatin into mitotic-like condense chromosomes. The condensin complex probably introduces positive supercoils into relaxed DNA in the presence of type I topoisomerases and converts nicked DNA into positive knotted forms in the presence of type II topoisomerases.

**Cellular Location**

Nucleus. Cytoplasm. Chromosome. Note=In interphase cells, the majority of the condensin complex is found in the cytoplasm, while a minority of the complex is associated with chromatin. A subpopulation of the complex however remains associated with chromosome foci in interphase

cells. During mitosis, most of the condensin complex is associated with the chromatin. At the onset of prophase, the regulatory subunits of the complex are phosphorylated by CDC2, leading to condensin's association with chromosome arms and to chromosome condensation. Dissociation from chromosomes is observed in late telophase

#### **Tissue Location**

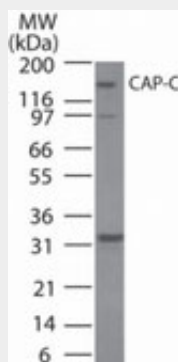
Widely expressed. Higher expression in testis, colon, thymus.

#### **SMC4 Antibody (aa47-61) - Protocols**

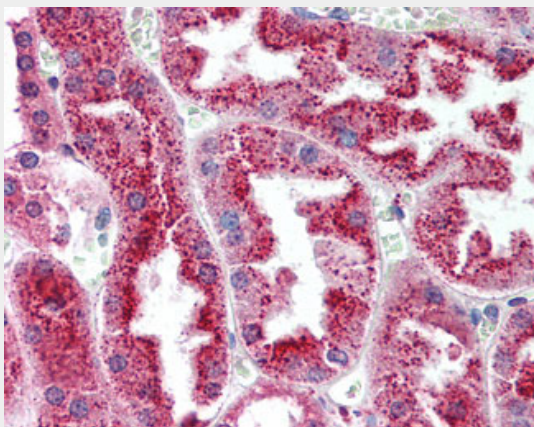
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **SMC4 Antibody (aa47-61) - Images**



Western blot of CAP-C in Ramos cell lysate using antibody at 2 mg/ml dilution.



Anti-SMC4 antibody IHC of human kidney.

#### **SMC4 Antibody (aa47-61) - Background**

Central component of the condensin complex, a complex required for conversion of interphase chromatin into mitotic-like condense chromosomes. The condensin complex probably introduces positive supercoils into relaxed DNA in the presence of type I topoisomerases and converts nicked DNA into positive knotted forms in the presence of type II topoisomerases.

#### **SMC4 Antibody (aa47-61) - References**

Nishiwaki T.,et al.J. Hum. Genet. 44:197-202(1999).  
Wiemann S.,et al.Genome Res. 11:422-435(2001).  
Bechtel S.,et al.BMC Genomics 8:399-399(2007).  
Muzny D.M.,et al.Nature 440:1194-1198(2006).  
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.