

# SMC4 antibody - N-terminal region

Rabbit Polyclonal Antibody

Catalog # AI12657

## Product Information

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| <b>Application</b>       | WB                                                             |
| <b>Primary Accession</b> | <a href="#">Q9NTJ3</a>                                         |
| <b>Other Accession</b>   | <a href="#">NM_001002800</a> , <a href="#">NP_001002800</a>    |
| <b>Reactivity</b>        | Human, Mouse, Rat, Rabbit, Pig, Dog, Guinea Pig, Horse, Bovine |
| <b>Predicted</b>         | Human, Mouse, Rat, Rabbit, Pig, Dog, Guinea Pig, Horse, Bovine |
| <b>Host</b>              | Rabbit                                                         |
| <b>Clonality</b>         | Polyclonal                                                     |
| <b>Calculated MW</b>     | 147182                                                         |

## Additional Information

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| <b>Gene ID</b>                      | 10051                                                                                                                                                                                         |
| <b>Alias Symbol</b>                 | CAPC, SMC4L1, hCAP-C, CAP-C, SMC-4                                                                                                                                                            |
| <b>Other Names</b>                  | Structural maintenance of chromosomes protein 4, SMC protein 4, SMC-4, Chromosome-associated polypeptide C, hCAP-C, XCAP-C homolog, SMC4, CAPC, SMC4L1                                        |
| <b>Format</b>                       | Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.                                                                                             |
| <b>Reconstitution &amp; Storage</b> | Add 50 ul of distilled water. Final anti-SMC4 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles. |
| <b>Precautions</b>                  | SMC4 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.                                                                           |

## Protein Information

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| <b>Name</b>              | SMC4                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Synonyms</b>          | CAPC, SMC4L1                                                                                                                                                                                                                                                                                                                                                         |
| <b>Function</b>          | 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. |
| <b>Cellular Location</b> | 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.

## References

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Ham, M.F., (2007) Cancer Sci. 98(7), 1041-1047 Reconstitution and Storage: For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.

## Images

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WB Suggested Anti-SMC4 Antibody Titration: 0.2-1 µg/ml  
ELISA Titer: 1:62500  
Positive Control: Jurkat cell lysate  
SMC4 is strongly supported by BioGPS gene expression data to be expressed in Human Jurkat cells

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.