

## SMC1A RABBIT PAB

**Cat.#:** S217834

**Product Name:** Anti-SMC1A Rabbit Polyclonal Antibody

**Synonyms:** SMC1; SMCB; CDLS2; SB1.8; SMC1L1; DXS423E; SMC1alpha

**UNIPROT ID:** Q14683 (Gene Accession - BC112127 )

**Background:** 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 SMC1B 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. Mutations in this gene result in Cornelia de Lange syndrome. Alternative splicing results in multiple transcript variants encoding different isoforms.

**Immunogen:** Fusion protein of human SMC1A

**Applications:** ELISA, IHC

**Recommended Dilutions:** IHC: 30-150; ELISA: 5000-10000

**Host Species:** Rabbit

**Clonality:** Rabbit Polyclonal

**Isotype:** Immunogen-specific rabbit IgG

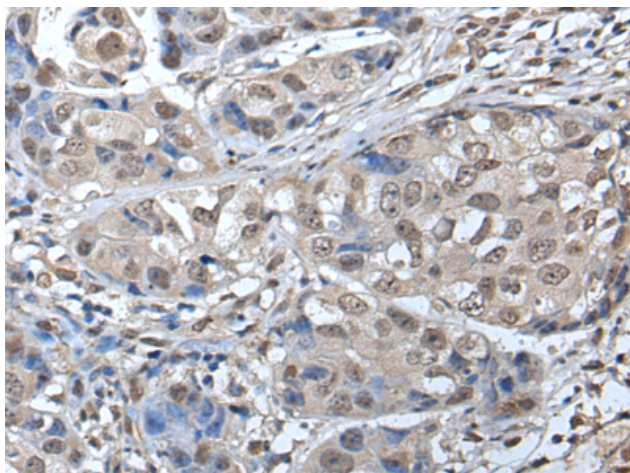
**Purification:** Antigen affinity purification

**Species Reactivity:** Human, Mouse, Rat

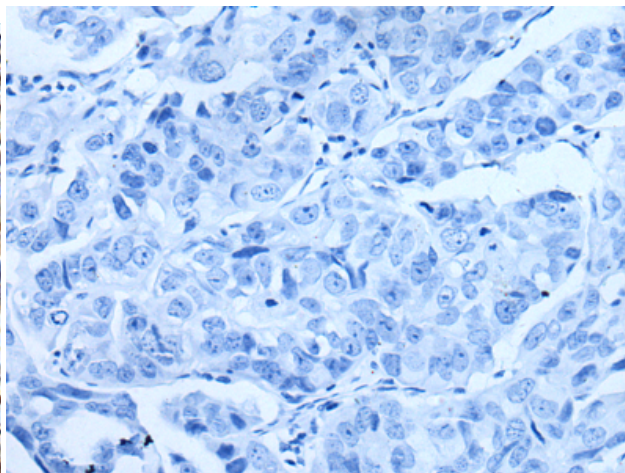
**Constituents:** PBS (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150 mM NaCl, 0.05% Sodium Azide and 40% glycerol

**Research Areas:** Epigenetics and Nuclear Signaling, Cancer

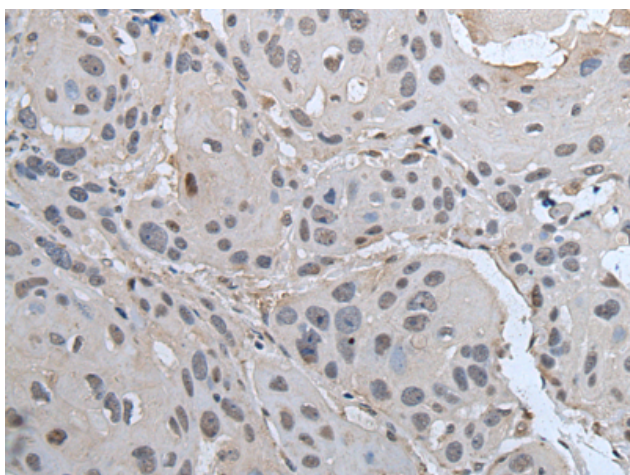
**Storage & Shipping:** Store at -20°C. Avoid repeated freezing and thawing



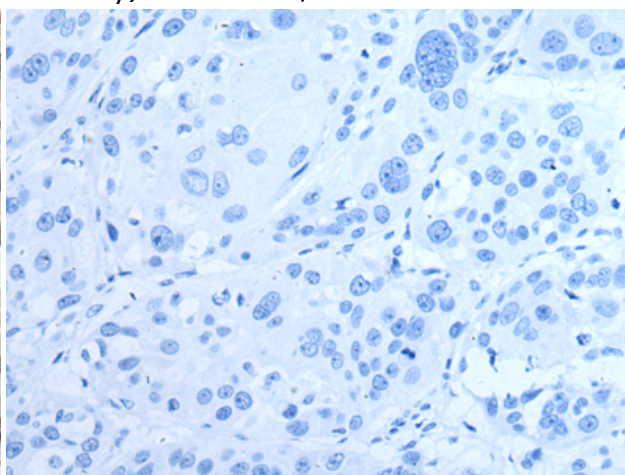
Immunohistochemistry analysis of paraffin embedded Human breast cancer tissue using 217834 (SMC1A Antibody) at a dilution of 1/45 (Nucleus).



In comparison with the IHC on the left, the same paraffin-embedded Human breast cancer tissue is first treated with the fusion protein and then with 217834 (Anti-SMC1A Antibody) at dilution 1/45.



The image on the left is immunohistochemistry of paraffin-embedded Human esophagus cancer tissue using 217834 (Anti-SMC1A Antibody) at a dilution of 1/45.



In comparison with the IHC on the left, the same paraffin-embedded Human esophagus cancer tissue is first treated with fusion protein and then with D223183 (Anti-SMC1A Antibody) at dilution 1/45.