

RCC1 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP1919a**Specification**

RCC1 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [P18754](#)**RCC1 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 1104**Other Names**

Regulator of chromosome condensation, Cell cycle regulatory protein, Chromosome condensation protein 1, RCC1, CHC1

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP1919a](/product/products/AP1919a) was selected from the N-term region of human RCC1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

RCC1 Antibody (N-term) Blocking Peptide - Protein Information**Name** RCC1**Synonyms** CHC1**Function**

Guanine-nucleotide releasing factor that promotes the exchange of Ran-bound GDP by GTP, and thereby plays an important role in RAN-mediated functions in nuclear import and mitosis (PubMed: [11336674](http://www.uniprot.org/citations/11336674), PubMed: [17435751](http://www.uniprot.org/citations/17435751), PubMed: [1944575](http://www.uniprot.org/citations/1944575), PubMed: [20668449](http://www.uniprot.org/citations/20668449), PubMed: [22215983](http://www.uniprot.org/citations/22215983), PubMed: [29042532](http://www.uniprot.org/citations/29042532)). Contributes to the generation of high levels of chromosome-associated, GTP-bound RAN, which is

important for mitotic spindle assembly and normal progress through mitosis (PubMed:12194828, PubMed:17435751, PubMed:22215983). Via its role in maintaining high levels of GTP-bound RAN in the nucleus, contributes to the release of cargo proteins from importins after nuclear import (PubMed:22215983). Involved in the regulation of onset of chromosome condensation in the S phase (PubMed:3678831). Binds both to the nucleosomes and double-stranded DNA (PubMed:17435751, PubMed:18762580).

Cellular Location

Nucleus. Chromosome. Cytoplasm Note=Predominantly nuclear in interphase cells (PubMed:12194828). Binds to mitotic chromosomes (PubMed:12194828, PubMed:17435751, PubMed:20668449).

RCC1 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

RCC1 Antibody (N-term) Blocking Peptide - Images

RCC1 Antibody (N-term) Blocking Peptide - Background

RCC1 promotes the exchange of Ran-bound GDP by GTP. It is involved in the regulation of onset of chromosome condensation in the S phase. RCC1 binds to chromatin. The RCC1/Ran complex (together with other proteins) acts as a component of a signal transmission pathway that detects unreplicated DNA. Patients with Raynaud disease produce antibodies that bind to RCC1.

RCC1 Antibody (N-term) Blocking Peptide - References

Beausoleil, S.A., et al., Proc. Natl. Acad. Sci. U.S.A. 101(33):12130-12135 (2004).Li, H.Y., et al., Genes Dev. 18(5):512-527 (2004).Cushman, I., et al., Mol. Biol. Cell 15(1):245-255 (2004).Moore, W., et al., Curr. Biol. 12(16):1442-1447 (2002).Nemergut, M.E., et al., J. Biol. Chem. 277(20):17385-17388 (2002).