

**RCC1 Antibody**  
**Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM1961b****Specification**

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**RCC1 Antibody - Product Information**

Application	WB,E
Primary Accession	<a href="#">P18754</a>
Other Accession	<a href="#">NP_001041664.1</a> , <a href="#">NP_001041659.1</a> , <a href="#">NP_001260.1</a>
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1,k
Calculated MW	44969

**RCC1 Antibody - Additional Information****Gene ID** 1104**Other Names**

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

**Target/Specificity**

This RCC1 monoclonal antibody is generated from mouse immunized with RCC1 recombinant protein.

**Dilution**

WB~~1:2000-1:4000

**Format**

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

RCC1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**RCC1 Antibody - 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](#), PubMed:[17435751](#), PubMed:[1944575](#), PubMed:[20668449](#), PubMed:[22215983](#), PubMed:[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

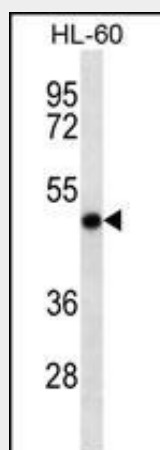
Nucleus. Chromosome. Cytoplasm Note=Predominantly nuclear in interphase cells (PubMed:[12194828](#)). Binds to mitotic chromosomes (PubMed:[12194828](#), PubMed:[17435751](#), PubMed:[20668449](#)).

#### RCC1 Antibody - Protocols

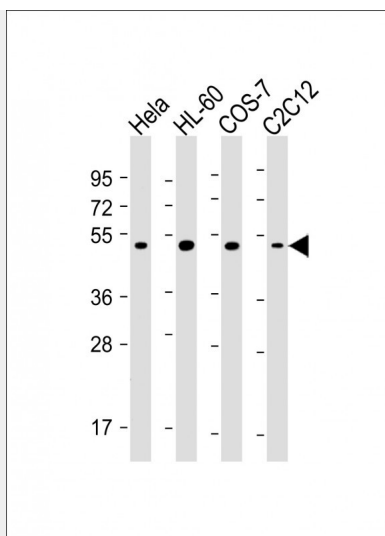
Provided below are standard protocols that you may find useful for product applications.

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

#### RCC1 Antibody - Images



RCC1 Antibody (Cat. #AM1961b) western blot analysis in HL-60 cell line lysates (35µg/lane). This demonstrates the RCC1 antibody detected the RCC1 protein (arrow).



All lanes : Anti-RCC1 Antibody at 1:2000-1:4000 dilution Lane 1: HeLa whole cell lysate Lane 2: HL-60 whole cell lysate Lane 3: COS-7 whole cell lysate Lane 4: C2C12 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 45 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

### **RCC1 Antibody - Background**

Guanine-nucleotide releasing factor that promotes the exchange of Ran-bound GDP by GTP. Involved in the regulation of onset of chromosome condensation in the S phase. Binds both to the nucleosomes and double-stranded DNA. RCC1-Ran complex (together with other proteins) acts as a component of a signal transmission pathway that detects unreplicated DNA. Plays a key role in nucleo-cytoplasmic transport, mitosis and nuclear-envelope assembly.

### **RCC1 Antibody - References**

Tooley, C.E., et al. Nature 466(7310):1125-1128(2010)  
England, J.R., et al. J. Mol. Biol. 398(4):518-529(2010)  
Wong, C.H., et al. Nat. Cell Biol. 11(1):36-45(2009)  
Ho, C.Y., et al. J. Cell. Biochem. 105(3):835-846(2008)  
Hao, Y., et al. J. Cell Biol. 182(5):827-836(2008)