

RCC1 Antibody (clone 2F1)
Mouse Monoclonal Antibody
Catalog # ALS14326**Specification**

RCC1 Antibody (clone 2F1) - Product Information

Application	WB, IF, IHC
Primary Accession	P18754
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	45kDa KDa

RCC1 Antibody (clone 2F1) - Additional Information**Gene ID** 1104**Other Names**

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

Target/Specificity

Human RCC1

Reconstitution & Storage

Aliquot and store at -20°C or -80°C. Avoid freeze-thaw cycles.

Precautions

RCC1 Antibody (clone 2F1) is for research use only and not for use in diagnostic or therapeutic procedures.

RCC1 Antibody (clone 2F1) - 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: [1944575](http://www.uniprot.org/citations/1944575), PubMed: [17435751](http://www.uniprot.org/citations/17435751), PubMed: [20668449](http://www.uniprot.org/citations/20668449), PubMed: [22215983](http://www.uniprot.org/citations/22215983), PubMed: [11336674](http://www.uniprot.org/citations/11336674)). 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](http://www.uniprot.org/citations/12194828), PubMed: [12194828](#)).

[17435751](http://www.uniprot.org/citations/17435751), PubMed:<[22215983](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/22215983)>). Involved in the regulation of onset of chromosome condensation in the S phase (PubMed:<[3678831](http://www.uniprot.org/citations/3678831)>). Binds both to the nucleosomes and double- stranded DNA (PubMed:<[17435751](http://www.uniprot.org/citations/17435751)>, PubMed:<[18762580](http://www.uniprot.org/citations/18762580)>).

Cellular Location

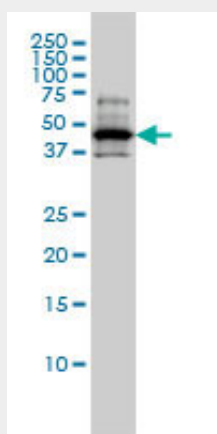
Nucleus. Chromosome. Cytoplasm Note=Predominantly nuclear in interphase cells (PubMed:12194828). Binds to mitotic chromosomes (PubMed:12194828, PubMed:17435751, PubMed:20668449).

RCC1 Antibody (clone 2F1) - Protocols

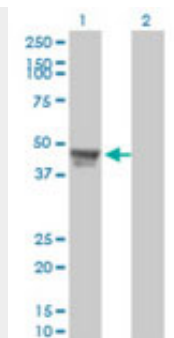
Provided below are standard protocols that you may find useful for product applications.

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

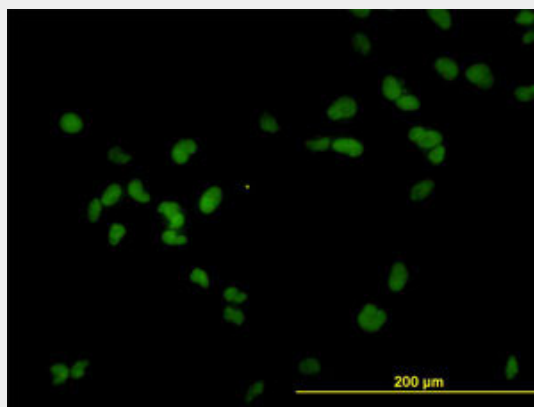
RCC1 Antibody (clone 2F1) - Images



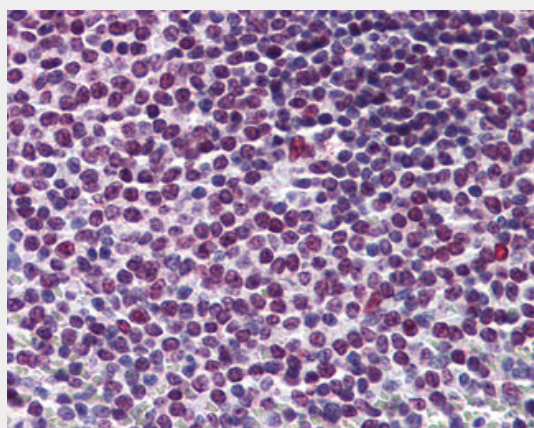
Western blot of RCC1 expression in A-431 cell lysate.



Western blot of RCC1 expression in transfected 293T cell line.



Immunofluorescence of monoclonal antibody to RCC1 on HeLa cell. [antibody concentration 10 ug/ml]



Anti-RCC1 antibody IHC of human spleen.

RCC1 Antibody (clone 2F1) - 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 (clone 2F1) - References

Ohtsubo M.,et al.Genes Dev. 1:585-593(1987).
Furuno N.,et al.Genomics 11:459-461(1991).

Puhl H.L. III, et al. Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases.
Miyabashira J., et al. J. Cell Sci. 107:2203-2208(1994).
Bischoff F.R., et al. Proc. Natl. Acad. Sci. U.S.A. 87:8617-8621(1990).