

RANBP1 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP6670a**Specification**

RANBP1 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [P43487](#)**RANBP1 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 5902**Other Names**

Ran-specific GTPase-activating protein, Ran-binding protein 1, RanBP1, RANBP1

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP6670a](/products/AP6670a) was selected from the N-term region of human RANBP1. 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.

RANBP1 Antibody (N-term) Blocking Peptide - Protein Information**Name** RANBP1**Function**

Plays a role in RAN-dependent nucleocytoplasmic transport. Alleviates the TNPO1-dependent inhibition of RAN GTPase activity and mediates the dissociation of RAN from proteins involved in transport into the nucleus (By similarity). Induces a conformation change in the complex formed by XPO1 and RAN that triggers the release of the nuclear export signal of cargo proteins (PubMed: [20485264](http://www.uniprot.org/citations/20485264)). Promotes the disassembly of the complex formed by RAN and importin beta. Promotes dissociation of RAN from a complex with KPNA2 and CSE1L (By similarity). Required for normal mitotic spindle assembly and normal progress through mitosis via its effect on RAN (PubMed: [17671426](http://www.uniprot.org/citations/17671426)). Does not increase the RAN GTPase activity by itself, but increases GTP hydrolysis mediated by RANGAP1 (PubMed: [7882974](http://www.uniprot.org/citations/7882974)). Inhibits RCC1- dependent exchange of RAN-bound GDP by GTP (PubMed: [7882974](#)).

[7882974](http://www.uniprot.org/citations/7882974), PubMed: [7616957](http://www.uniprot.org/citations/7616957)).

RANBP1 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

RANBP1 Antibody (N-term) Blocking Peptide - Images

RANBP1 Antibody (N-term) Blocking Peptide - Background

Ran/TC4-binding protein, RanBP1, interacts specifically with GTP-charged RAN. RANBP1 encodes a 23-kD protein that binds to RAN complexed with GTP but not GDP. RANBP1 does not activate GTPase activity of RAN but does markedly increase GTP hydrolysis by the RanGTPase-activating protein (RanGAP1). The RANBP1 cDNA encodes a 201-amino acid protein that is 92% similar to its mouse homolog. In both mammalian cells and in yeast, RANBP1 acts as a negative regulator of RCC1 by inhibiting RCC1-stimulated guanine nucleotide release from RAN.

RANBP1 Antibody (N-term) Blocking Peptide - References

Rensen,W.M., Oncogene 28 (15), 1748-1758 (2009)Tedeschi,A., J. Cell. Sci. 120 (PT 21), 3748-3761 (2007)