

# RANBP1 Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP51830

## Product Information

---

Application	WB
Primary Accession	<a href="#">P43487</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	23310

## Additional Information

---

Gene ID	5902
Other Names	Ran-specific GTPase-activating protein, Ran-binding protein 1, RanBP1, RANBP1
Dilution	WB~~1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

## 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: <a href="#">20485264</a> ). 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: <a href="#">17671426</a> ). Does not increase the RAN GTPase activity by itself, but increases GTP hydrolysis mediated by RANGAP1 (PubMed: <a href="#">7882974</a> ). Inhibits RCC1- dependent exchange of RAN-bound GDP by GTP (PubMed: <a href="#">7616957</a> , PubMed: <a href="#">7882974</a> ).

## Background

---

Inhibits GTP exchange on Ran. Forms a Ran-GTP-RANBP1 trimeric complex. Increase GTP hydrolysis induced by the Ran GTPase activating protein RANGAP1. May act in an intracellular signaling pathway which may control the progression through the cell cycle by regulating the transport of protein and nucleic acids across the nuclear membrane.

## References

---

Bischoff F.R.,et al.EMBO J. 14:705-715(1995).  
Hayashi N.,et al.Mol. Gen. Genet. 247:661-669(1995).  
Collins J.E.,et al.Genome Biol. 5:R84.1-R84.11(2004).  
Dephoure N.,et al.Proc. Natl. Acad. Sci. U.S.A. 105:10762-10767(2008).  
Gauci S.,et al.Anal. Chem. 81:4493-4501(2009).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.