

## **RANBP1 Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51830

## **Specification**

## **RANBP1 Antibody - Product Information**

Application WB, E
Primary Accession P43487
Reactivity Human, Mouse, Rat
Rost Rabbit
Clonality Polyclonal
Calculated MW 23 KDa

## **RANBP1 Antibody - Additional Information**

**Gene ID** 5902

#### **Other Names**

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

Dilution WB~~1:1000

E~~N/A

### **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

# **RANBP1 Antibody - 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="http://www.uniprot.org/citations/20485264" target="\_blank">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="http://www.uniprot.org/citations/17671426" target="\_blank">17671426</a>). Does not increase the RAN GTPase activity by itself, but increases GTP hydrolysis mediated by RANGAP1 (PubMed:<a href="http://www.uniprot.org/citations/7882974" target="\_blank">7882974</a>). Inhibits RCC1- dependent exchange of RAN-bound GDP by GTP (PubMed:<a href="http://www.uniprot.org/citations/7616957" target="\_blank">7616957</a>/a>, PubMed:<a href="http://www.uniprot.org/citations/7616957" target="\_blank">7616957</a>/a>, PubMed:<a



href="http://www.uniprot.org/citations/7882974" target=" blank">7882974</a>).

# **RANBP1 Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **RANBP1 Antibody - Images**

# **RANBP1 Antibody - 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.

## **RANBP1 Antibody - 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).