10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Goat Anti-RANBP1 Antibody

Peptide-affinity purified goat antibody
Catalog # AF1907a

Specification

Goat Anti-RANBP1 Antibody - Product Information

Application	**WB, IHC, IF, FC**
Primary Accession	P43487
Other Accession	NP_002873, 5902
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**23310**

Goat Anti-RANBP1 Antibody - Additional Information

Gene ID 5902

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

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-RANBP1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-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: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

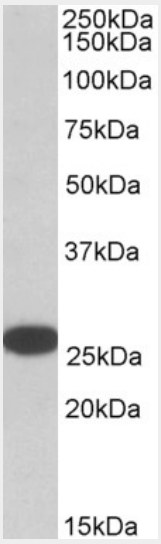
assembly and normal progress through mitosis via its effect on RAN (PubMed:17671426). Does not increase the RAN GTPase activity by itself, but increases GTP hydrolysis mediated by RANGAP1 (PubMed:7882974). Inhibits RCC1- dependent exchange of RAN-bound GDP by GTP (PubMed:7882974, PubMed:7616957).

Goat Anti-RANBP1 Antibody - Protocols

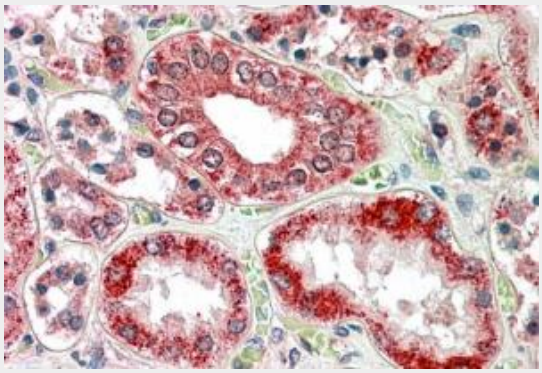
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-RANBP1 Antibody - Images

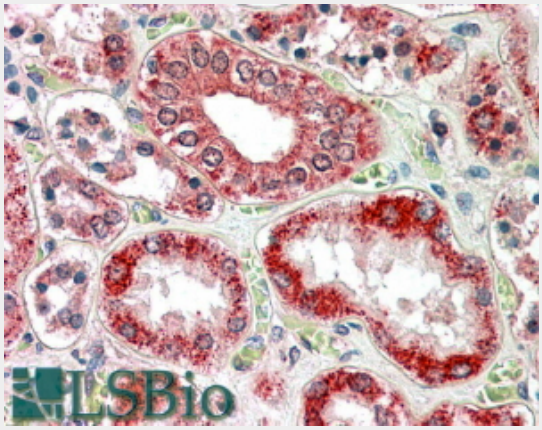


AF1907a (0.05 µg/ml) staining of HELA lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.chemiluminescence.



10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

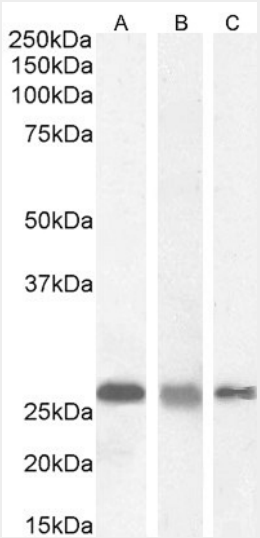
EB6420 (3.8 µg/ml) staining of paraffin embedded Human Kidney. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



EB6420 (3.8µg/ml) staining of paraffin embedded Human Kidney. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

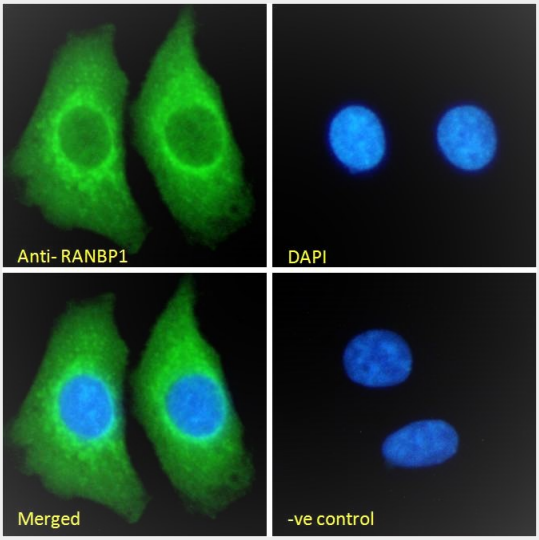


EB06420 (0.3µg/ml) staining of Human Duodenum lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.

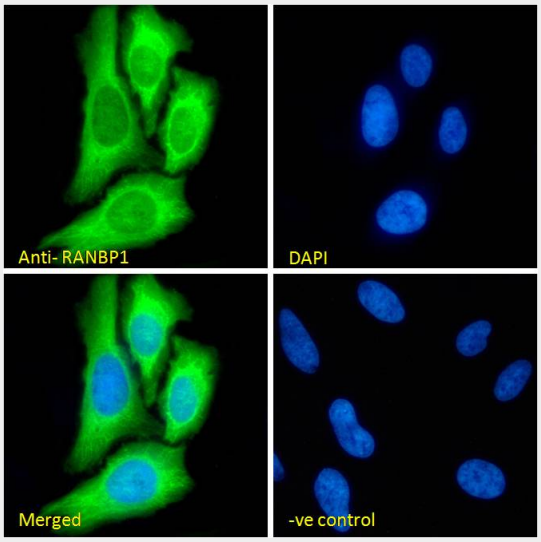


10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

EB06420 (0.03µg/ml) staining of A431 (A), (0.5ug/ml) HeLa (B) and (0.1ug/ml) MCF7 (C) cell lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.

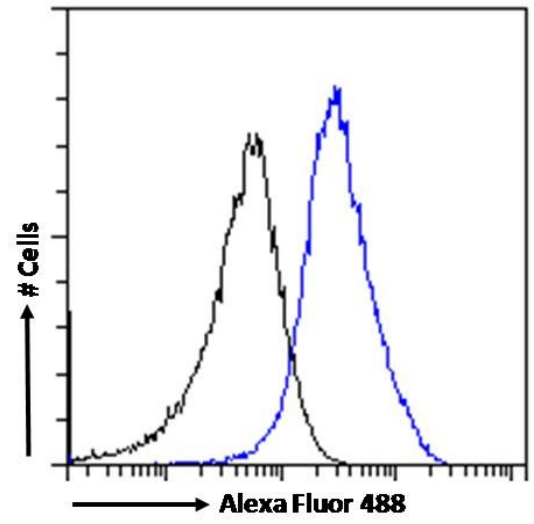


EB06420 Immunofluorescence analysis of paraformaldehyde fixed HEK293 cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing cytoplasmic staining. The nuclear stain is DAPI



EB06420 Immunofluorescence analysis of paraformaldehyde fixed HeLa cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing cytoplasmic staining. The nuclear stain is DAPI (b

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



EB06420 Flow cytometric analysis of paraformaldehyde fixed HEK293 cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml). IgG control: Unimmunized goat IgG (black line) f

Goat Anti-RANBP1 Antibody - 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.

Goat Anti-RANBP1 Antibody - References

Centrosome-related genes, genetic variation, and risk of breast cancer. Olson JE, et al. Breast Cancer Res Treat, 2010 May 28. PMID 20508983.
Importin-beta is a GDP-to-GTP exchange factor of Ran: implications for the mechanism of nuclear import. Lonhienne TG, et al. J Biol Chem, 2009 Aug 21. PMID 19549784.
RanBP1 downregulation sensitizes cancer cells to taxol in a caspase-3-dependent manner. Rensen WM, et al. Oncogene, 2009 Apr 16. PMID 19270727.
RANBP1 localizes a subset of mitotic regulatory factors on spindle microtubules and regulates chromosome segregation in human cells. Tedeschi A, et al. J Cell Sci, 2007 Nov 1. PMID 17940066.
Large-scale mapping of human protein-protein interactions by mass spectrometry. Ewing RM, et al. Mol Syst Biol, 2007. PMID 17353931.