

For Research Use Only

# RAN Recombinant antibody, PBS Only

Catalog Number: 82978-1-PBS



## Basic Information

<b>Catalog Number:</b> 82978-1-PBS	<b>GenBank Accession Number:</b> BC004272	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug, Concentration: 1mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 5901	<b>CloneNo.:</b> 230317F3
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P62826	
<b>Isotype:</b> IgG	<b>Full Name:</b> RAN, member RAS oncogene family	
<b>Immunogen Catalog Number:</b> AG0748	<b>Calculated MW:</b> 25 kDa	
	<b>Observed MW:</b> 24 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, FC (Intra), Indirect ELISA

**Species Specificity:**  
human, mouse, rat

## Background Information

RAN is also named as ARA24, Ras-like protein TC4 and GTPase Ran, and belongs to the small GTPase superfamily family and the Ran family. GTPase Ran switches between a cytoplasmic GDP- and a nuclear GTP-bound state by nucleotide exchange and GTP hydrolysis (PMID:7819259, PMID:32528950). RAN (GTP-bound form) triggers microtubule assembly at mitotic chromosomes and is required for normal mitotic spindle assembly and chromosome segregation (PMID:10408446, PMID:29040603, PMID:32528950).

## Storage

**Storage:**  
Store at -80°C.  
**Storage Buffer:**  
PBS Only

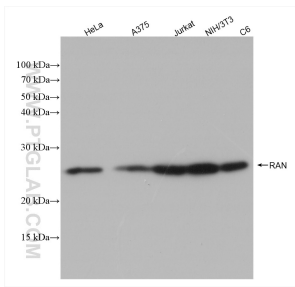
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

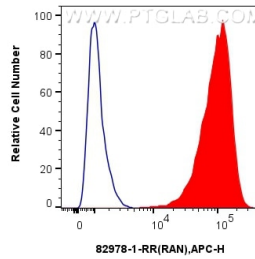
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

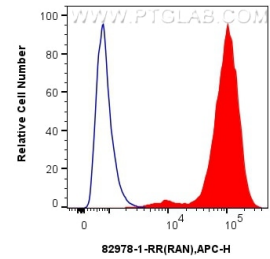
## Selected Validation Data



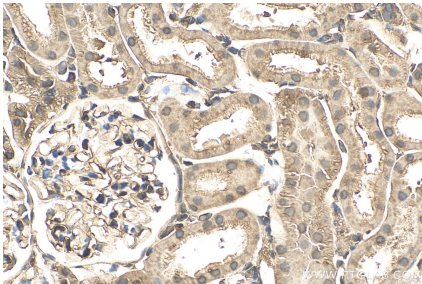
Various lysates were subjected to SDS PAGE followed by western blot with 82978-1-RR (RAN antibody) at dilution of 1:2500 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 82978-1-PBS in a different storage buffer formulation.



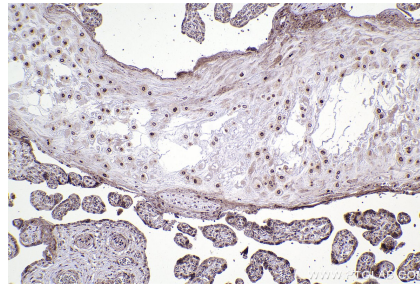
$1 \times 10^6$  A431 cells were intracellularly stained with 0.25  $\mu$ g Anti-Human RAN (82978-1-RR, Clone:230317F3) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25  $\mu$ g Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set. This data was developed using the same antibody clone with 82978-1-PBS in a different storage buffer formulation.



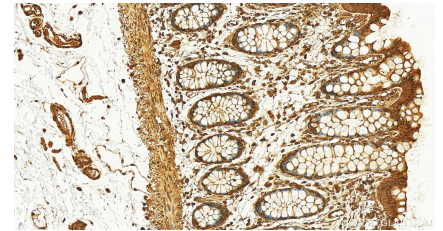
$1 \times 10^6$  HeLa cells were intracellularly stained with 0.25  $\mu$ g Anti-Human RAN (82978-1-RR, Clone:230317F3) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25  $\mu$ g Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set. This data was developed using the same antibody clone with 82978-1-PBS in a different storage buffer formulation.



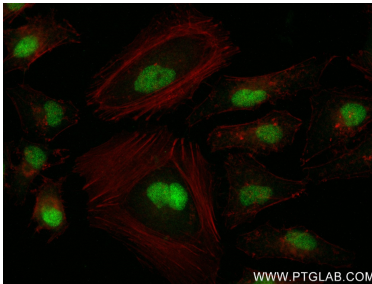
Immunohistochemical analysis of paraffin-embedded rat kidney tissue slide using 82978-1-RR (RAN antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 82978-1-PBS in a different storage buffer formulation.



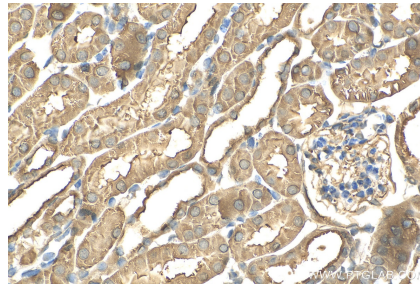
Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 82978-1-RR (RAN antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 82978-1-PBS in a different storage buffer formulation.



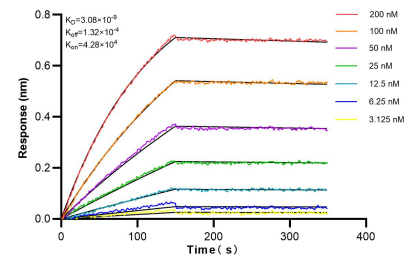
Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 82978-1-RR (RAN antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 82978-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using RAN antibody (82978-1-RR, Clone: 230317F3) at dilution of 1:250 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 82978-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using 82978-1-RR (RAN antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 82978-1-PBS in a different storage buffer formulation.



Bi-layer interferometry (BLI) kinetic assays of 82978-1-RR against Human RAN were performed. The affinity constant is 3.08 nM.