For Research Use Only

RAN Recombinant antibody

Catalog Number:82978-1-RR



Basic Information

Catalog Number: GenBank Accession Number: 82978-1-RR BC004272

 Size:
 GeneID (NCBI):
 CloneNo.:

 250 ug/ml
 5901
 230317F3

 Source:
 UNIPROT ID:
 Recommended Dilutions:

 Rabbit
 P62826
 WB 1:1000-1:5000

 Isotype:
 Full Name:
 IHC 1:250-1:1000

 IgG
 RAN, member RAS oncogene family
 IF/ICC 1:125-1:500

Immunogen Catalog Number: Calculated MW:

AG0748 25 kDa

Observed MW: 24 kDa

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

Species Specificity: human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Positive Controls:

WB: HeLa cells, A375 cells, Jurkat cells, NIH/3T3 cells,

Purification Method:

Protein A purification

C6 cells

IHC: human colon tissue, mouse kidney tissue, rat

kidney tissue, human placenta tissue

IF/ICC: HeLa cells,

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:

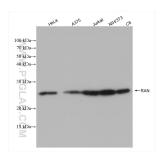
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

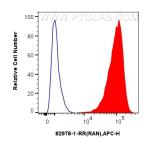
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

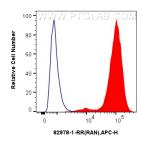
Selected Validation Data



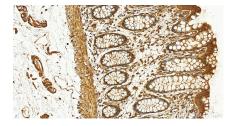
Various lysates were subjected to SDS PAGE followed by western blot with 82978-1-RR (RAN antibody) at dilution of 1:2500 incubated at room temperature for 1.5 hours.



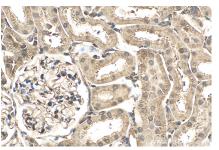
1x10^6 A431 cells were intracellularly stained with 0.25 ug Anti-Human RAN (82978-1-RR, Clone:230317F3) and APC-Conjugated AffiniPure Goat Anti-Rabbit 1gG(H+L)(red), or 0.25 ug Rabbit 1gG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set.



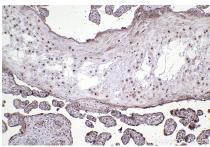
1x10^6 HeLa cells were intracellularly stained with 0.25 ug Anti-Human RAN (82978-1-RR, Clone:230317F3) and APC-Conjugated AffiniPure Goat Anti-Rabbit 1gG(H+L)(red), or 0.25 ug Rabbit 1gG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set.



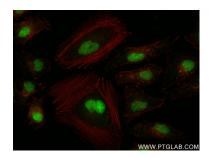
Immunohistochemical analysis of paraffinembedded human colon tissue slide using 82978-1-RR (RAN antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



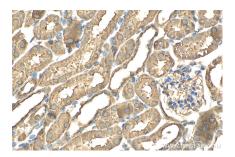
Immunohistochemical analysis of paraffinembedded rat kidney tissue slide using 82978-1-RR (RAN antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



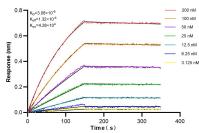
Immunohistochemical analysis of paraffinembedded human placenta tissue slide using 82978-1-RR (RAN antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



Immunohistochemical analysis of paraffinembedded 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).



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