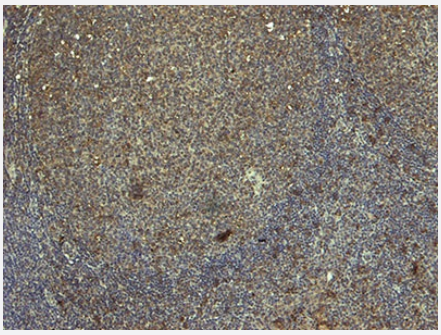
RAN polyclonal antibody

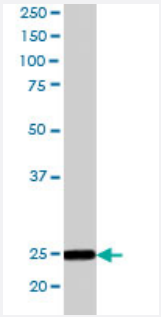
Catalog # PAB6653 Size 100 ug

Applications



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

RAN polyclonal antibody (Cat # PAB6653) (3 ug/mL) staining of paraffin embedded Human Tonsil. Heat induced antigen retrieval with citrate buffer pH 6, HRP-staining.



Western Blot (Cell lysate)

RAN polyclonal antibody (Cat # PAB6653) (0.5 ug/mL) staining of A431 (35 ug protein in RIPA buffer). Detected by chemiluminescence.

Specification

Product Description	Goat polyclonal antibody raised against synthetic peptide of RAN.
Immunogen	A synthetic peptide corresponding to human RAN.
Sequence	AAQGEPQVQFKLV-C
Host	Goat
Theoretical MW (kDa)	24.4
Reactivity	Human, Mouse
Form	Liquid

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Purification	Antigen affinity purification
Concentration	0.5 mg/mL
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.
Recommend Usage	ELISA (1:32000) Immunohistochemistry (3 ug/mL) Western Blot (0.3 -1.0 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In Tris saline, pH 7.3 (0.5% BSA, 0.02% sodium azide)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

  RAN polyclonal antibody (Cat # PAB6653) (3 ug/mL) staining of paraffin embedded Human Tonsil. Heat induced antigen retrieval with citrate buffer pH 6, HRP-staining.

- Enzyme-linked Immunoabsorbent Assay

- Western Blot (Cell lysate)

  RAN polyclonal antibody (Cat # PAB6653) (0.5 ug/mL) staining of A431 (35 ug protein in RIPA buffer). Detected by chemiluminescence.

Gene Info — RAN

Entrez GeneID	5901
Protein Accession#	NP_006316
Gene Name	RAN
Gene Alias	ARA24, Gsp1, TC4
Gene Description	RAN, member RAS oncogene family
Omim ID	601179

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Gene Ontology	Hyperlink
Gene Summary	RAN (ras-related nuclear protein) is a small GTP binding protein belonging to the RAS superfamily that is essential for the translocation of RNA and proteins through the nuclear pore complex. The RAN protein is also involved in control of DNA synthesis and cell cycle progression. Nuclear localization of RAN requires the presence of regulator of chromosome condensation 1 (RCC1). Mutations in RAN disrupt DNA synthesis. Because of its many functions, it is likely that RAN interacts with several other proteins. RAN regulates formation and organization of the microtubule network independently of its role in the nucleus-cytosol exchange of macromolecules. RAN could be a key signaling molecule regulating microtubule polymerization during mitosis. RCC1 generates a high local concentration of RAN-GTP around chromatin which, in turn, induces the local nucleation of microtubules. RAN is an androgen receptor (AR) coactivator that binds differentially with different lengths of polyglutamine within the androgen receptor. Polyglutamine repeat expansion in the AR is linked to Kennedy's disease (X-linked spinal and bulbar muscular atrophy). RAN coactivation of the AR diminishes with polyglutamine expansion within the AR, and this weak coactivation may lead to partial androgen insensitivity during the development of Kennedy's disease. [provided by RefSeq
Other Designations	OK/SW-cl.81|RanGTPase|guanosine triphosphatase Ran|member RAS oncogene family|ras-related nuclear protein

Publication Reference

- Screening of organoids derived from patients with breast cancer implicates the repressor NCOR2 in cytotoxic stress response and antitumor immunity.

  Kelvin K Tsai, Shenq-Shyang Huang, Jason J Northey, Wen-Ying Liao, Chung-Chi Hsu, Li-Hsin Cheng, Michael E Werner, Chih-Pin Chuu, Chandrima Chatterjee, Jonathon N Lakins, Valerie M Weaver

  Nat Cancer 2022 6; 3(6):734-752.

- Ran/TC4: a small nuclear GTP-binding protein that regulates DNA synthesis.

  Ren M, Drivas G, D'Eustachio P, Rush MG.

  The Journal of Cell Biology 1993 Jan; 120(2):313.

  Application: IF, IP, WB-Ce, Human, Monkey, Mouse, 3T3, COS, HeLa cells

Disease

- Adenocarcinoma
- Carcinoma
- Esophageal Neoplasms
- Fetal Membranes

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- Genetic Predisposition to Disease
- Head and Neck Neoplasms
- Kidney Neoplasms
- Lung Neoplasms
- Mouth Neoplasms
- Neoplasm Recurrence
- Neoplasms
- Precancerous Conditions
- Premature Birth

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