Product Name: Ran Rabbit Polyclonal Antibody
Catalog #: APRab16880

Summary

Production Name	Ran Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IHC,WB,ELISA
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	RAN
Alternative Names	RAN; ARA24; OK/SW-cl.81; GTP-binding nuclear protein Ran; Androgen receptor-associated protein 24; GTPase Ran; Ras-like protein TC4; Ras-related nuclear protein
Gene ID	5901.0
SwissProt ID	P62826.The antiserum was produced against synthesized peptide derived from human RAN. AA range:167-216

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000..
Molecular Weight	25kD

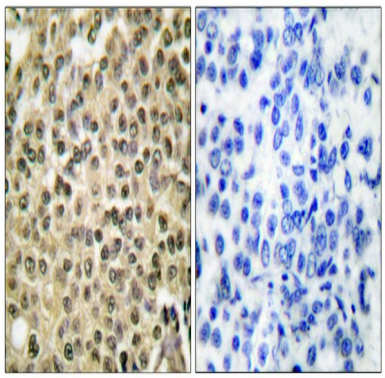
Product Name: Ran Rabbit Polyclonal Antibody
Catalog #: APRab16880

Background

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 refunction:Enhances AR-mediated transactivation. Transactivation decreases as the poly-Gln length within AR increases.,function:GTP-binding protein involved in nucleocytoplasmic transport. Required for the import of protein into the nucleus and also for RNA export. Involved in chromatin condensation and control of cell cycle.,PTM:The N-terminus is blocked.,similarity:Belongs to the small GTPase superfamily. Ran family.,subcellular location:Becomes dispersed throughout the cytoplasm during mitosis. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.,subunit:Monomer. Also forms a complex with CHC1 and interacts with the AR N-terminal poly-Gln region. The interaction with AR is inversely correlated with the poly-Gln length. Part of a complex consisting of RANBP9, Ran, DYRK1B and COPS5. Found in a nuclear export complex with RANBP3 and XPO1. Component of a nuclear export receptor complex composed of KPNB1, Ran, SNUPN and XPO1. Found in a trimeric export complex with SNUPN, Ran and XPO1. Interacts with RANBP10. In case of HIV-1 infection, found in a complex with HIV-1 Rev, RNAs containing a Rev response element (RRE) and XPO1. Found in a complex with HTLV-1 Rex, RANBP3 and XPO1.,tissue specificity:Expressed in a variety of tissues.,

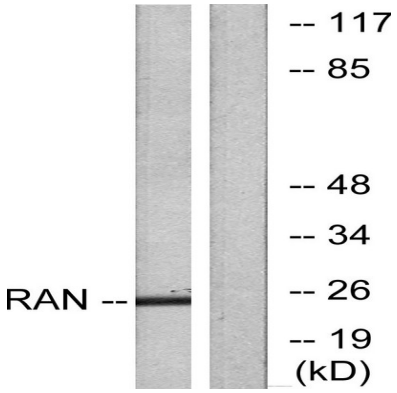
Research Area

Image Data

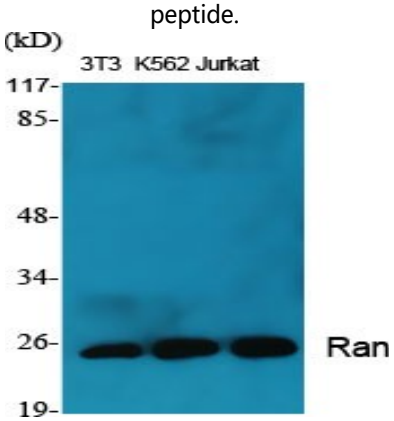


Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using RAN Antibody. The picture on the right is blocked with the synthesized peptide.

Product Name: Ran Rabbit Polyclonal Antibody
Catalog #: APRab16880



Western blot analysis of lysates from LOVO cells, using RAN Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using Ran Polyclonal Antibody diluted at 1：2000

Note

For research use only.