

Ran Polyclonal Antibody

Catalog No :	YT3998
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF;ELISA
Target :	Ran
Fields :	>>Ribosome biogenesis in eukaryotes;>>Nucleocytoplasmic transport;>>Viral life cycle - HIV-1;>>Human T-cell leukemia virus 1 infection
Gene Name :	RAN
Protein Name :	GTP-binding nuclear protein Ran
Human Gene Id :	5901
Human Swiss Prot No :	P62826
Mouse Gene Id :	1.00046e+008
Mouse Swiss Prot No :	P62827
Rat Gene Id :	84509
Rat Swiss Prot No :	P62828
Immunogen :	The antiserum was produced against synthesized peptide derived from human RAN. AA range:167-216
Specificity :	Ran Polyclonal Antibody detects endogenous levels of Ran protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200

Purification : The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 25kD

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 re

Function : function: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

Subcellular Location : Nucleus . Nucleus envelope . Cytoplasm, cytosol . Cytoplasm . Melanosome . Predominantly nuclear during interphase (PubMed:8421051, PubMed:12194828, PubMed:10679025). Becomes dispersed throughout the cytoplasm during mitosis (PubMed:8421051, PubMed:12194828). Identified by mass spectrometry in melanosome fractions from stage I to stage IV (PubMed:17081065). .

Expression : Expressed in a variety of tissues.

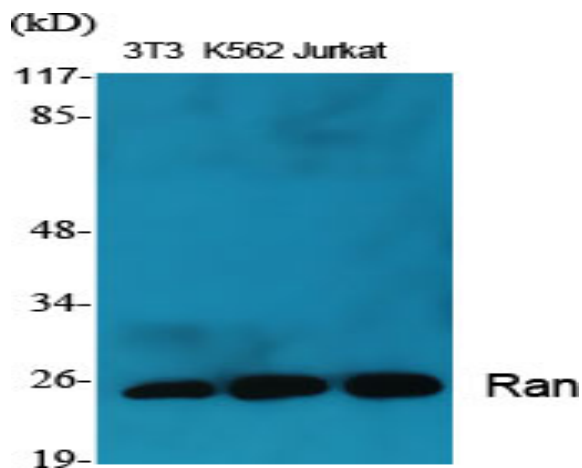
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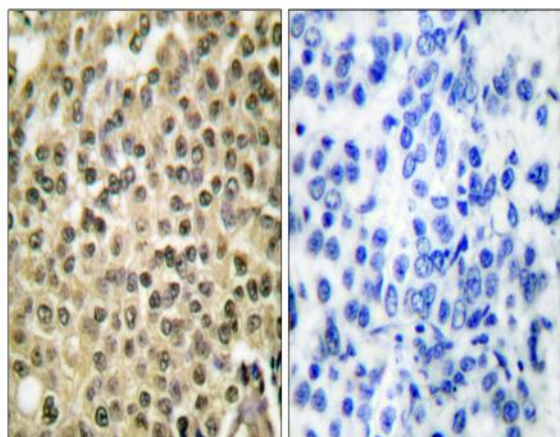
Host : Rabbit

Modifications : Unmodified

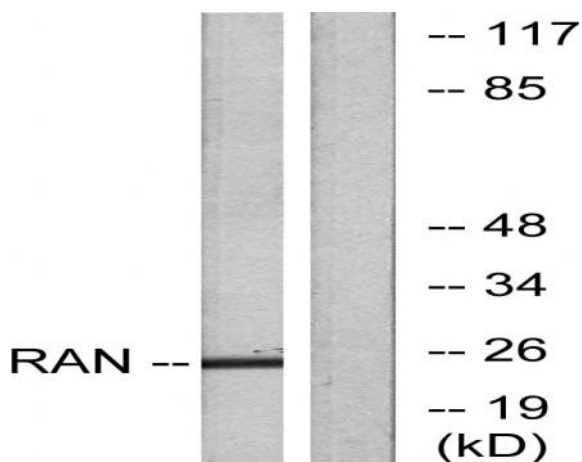
Products Images



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



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



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