



Ran rabbit pAb

Cat No.:ES3322

For research use only

Overview

Product Name	Ran rabbit pAb
Host species	Rabbit
Applications	WB;IHC;IF;ELISA
Species Cross-Reactivity	Human;Mouse;Rat
Recommended dilutions	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications.
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.
Storage	Store at -20°C. Avoid repeated freeze-thaw cycles.
Protein Name	GTP-binding nuclear protein Ran
Gene Name	RAN
Cellular localization	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:121948
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clonality	Polyclonal
Concentration	1 mg/ml
Observed band	25kD
Human Gene ID	5901
Human Swiss-Prot Number	P62826
Alternative Names	RAN; ARA24; OK/SW-cl.81; GTP-binding nuclear protein Ran; Androgen receptor-associated protein

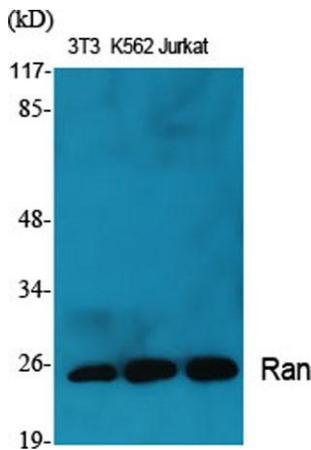




Background

24; GTPase Ran; Ras-like protein TC4; Ras-related nuclear protein

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

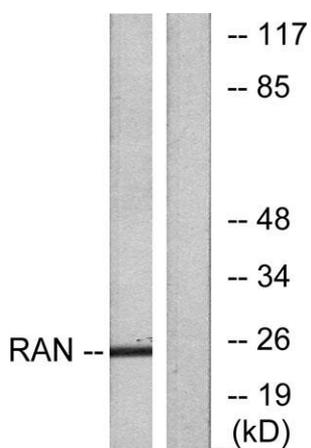
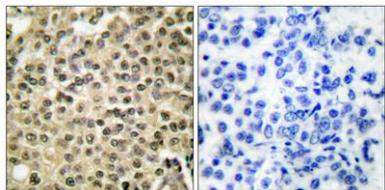


Western Blot analysis of various cells using Ran Polyclonal Antibody diluted at 1:2000





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.

