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Product datasheet for AP17702PU-N

RAN (N-term) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	ELISA: 1/1,000. Western blotting: 1/50 - 1/100.
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	KLH conjugated synthetic peptide selected from the N-terminal region of human RAN
Specificity:	This antibody reacts to RAN.
Formulation:	PBS with 0.09% (W/V) sodium azide State: Liquid purified Ig
Concentration:	lot specific
Purification:	Saturated Ammonium Sulfate (SAS) precipitation
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	RAN, member RAS oncogene family
Database Link:	Entrez Gene 19384 MouseEntrez Gene 5901 Human P62826

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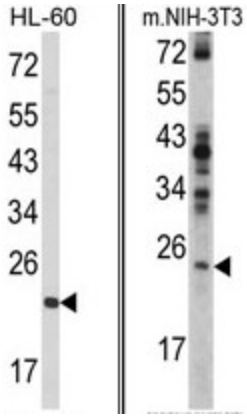
Background: RAN (ras-related nuclear protein) is a small GTP binding protein belonging to the RAS superfamily that is essential for the translocation of RNA and proteins through the nuclear pore complex. The RAN protein is also involved in control of DNA synthesis and cell cycle progression. Nuclear 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 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.

Synonyms: GTPase Ran, ARA24

Protein Families: Druggable Genome, Transcription Factors

Product images:



(LEFT) Western blot analysis of RAN Antibody (N-term) in HL-60 cell line lysates (35ug/lane).RAN (arrow) was detected using the purified Pab. (RIGHT) Western blot analysis of RAN antibody (N-term) in NIH-3T3 cell line lysates (35ug/lane). RAN (arrow) was detected using the purified Pab.