

RAN Polyclonal Antibody

Catalog No. E-AB-60121

Note: Centrifuge before opening to ensure complete recovery of vial contents.

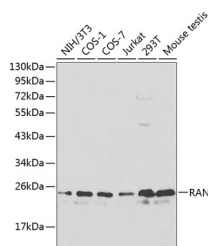
Description

Reactivity	Human, Mouse, Rat
Immunogen	Recombinant fusion protein of human RAN (NP_006316.1).
Host	Rabbit
Isotype	IgG
Purification	Affinity purification
Conjugation	Unconjugated
Buffer	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Applications Recommended Dilution

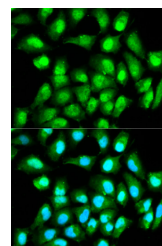
WB	1:500-1:2000
IF	1:50-1:200

Data



Western blot analysis of extracts of various cell lines using RAN Polyclonal Antibody at dilution of 1:1000.

Observed Mw:23kDa
Calculated Mw:24kDa



Immunofluorescence analysis of HeLa cells using RAN Polyclonal Antibody

Preparation & Storage

Storage Store at -20°C. Avoid freeze / thaw cycles.

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

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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.