

RecomAb™

RAN recombinant monoclonal antibody, clone R01-7J8

Catalog # RAB04829 Size 100 uL

Specification	
Product Description	Rabbit recombinant monoclonal antibody raised against human RAN.
Antibody Species	Rabbit
Immunogen	Original antibody is raised against a synthetic peptide corresponding to human RAN.
Theoretical MW (kDa)	24
Reactivity	Human, Monkey, Mouse
Form	Liquid
Purification	Affinity chromatography
Isotype	lgG
Recommend Usage	Immunocytochemistry (1:50-1:200) Immunofluorescence (1:50-1:200) Immunoprecipitation (1:20) Western Blot (1:500-1:1000) The optimal working dilution should be determined by the end user.
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot
- Immunocytochemistry
- Immunofluorescence



Immunoprecipitation

Gene Info — RAN	
Entrez GenelD	<u>5901</u>
Protein Accession#	P62826
Gene Name	RAN
Gene Alias	ARA24, Gsp1, TC4
Gene Description	RAN, member RAS oncogene family
Omim ID	<u>601179</u>
Gene Ontology	<u>Hyperlink</u>
Gene Summary	RAN (ras-related nuclear protein) is a small GTP binding protein belonging to the RAS superfamil y 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 locali zation of RAN requires the presence of regulator of chromosome condensation 1 (RCC1). Mutati ons 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. [provided by RefSequirial androgen insensitivity during the development of Kennedy's disease. [provided by RefSequirian]
Other Designations	OK/SW-cl.81 RanGTPase guanosine triphosphatase Ran member RAS oncogene family ras-relat ed nuclear protein

Disease

- Adenocarcinoma
- Carcinoma
- Esophageal Neoplasms
- Fetal Membranes



- Genetic Predisposition to Disease
- Head and Neck Neoplasms
- Kidney Neoplasms
- Lung Neoplasms
- Mouth Neoplasms
- Neoplasm Recurrence
- Neoplasms
- Precancerous Conditions
- Premature Birth