

## Summary

<b>Production Name</b>	RAN Mouse Monoclonal Antibody
<b>Description</b>	Mouse Monoclonal Antibody
<b>Host</b>	Mouse
<b>Application</b>	WB,IHC,FC,ELISA
<b>Reactivity</b>	Human,Rat,Monkey

## Performance

<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	Mouse IgG1
<b>Clonality</b>	Monoclonal
<b>Form</b>	Liquid
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
<b>Buffer</b>	Purified antibody in PBS with 0.05% sodium azide
<b>Purification</b>	Affinity Purification

## Immunogen

<b>Gene Name</b>	RAN
<b>Alternative Names</b>	TC4; Gsp1; ARA24
<b>Gene ID</b>	5901.0
<b>SwissProt ID</b>	P62826.Purified recombinant fragment of human RAN (AA: 1-216) expressed in E. Coli.

## Application

<b>Dilution Ratio</b>	WB:1:500-1:2000,IHC:1:200-1:1000,FC:1:200-1:400,ELISA:1:10000
<b>Molecular Weight</b>	24.4kDa

## Background

RAN (ras-related nuclear protein) is a small GTP binding protein belonging to the RAS superfamily that is essential for the

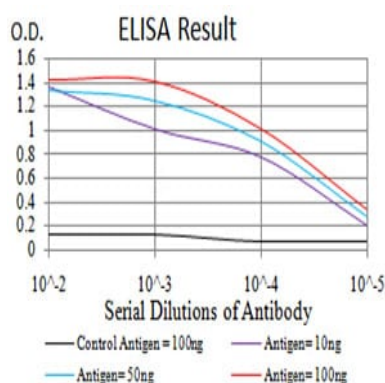
**Product Name: RAN Mouse Monoclonal Antibody**  
**Catalog #: AMM81657**



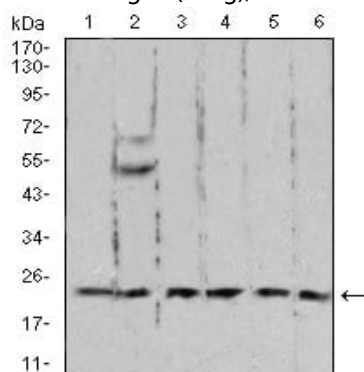
translocation of RNA and proteins through the nuclear pore complex. The RAN protein is also involved in control of DNA synthesis and cell cycle progression. Nuclear localization of RAN requires the presence of regulator of chromosome condensation 1 (RCC1). Mutations in RAN disrupt DNA synthesis. Because 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. <br />

## Research Area

## Image Data

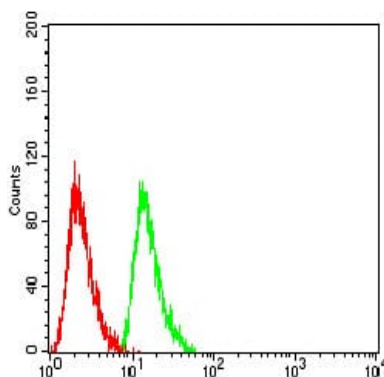


Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

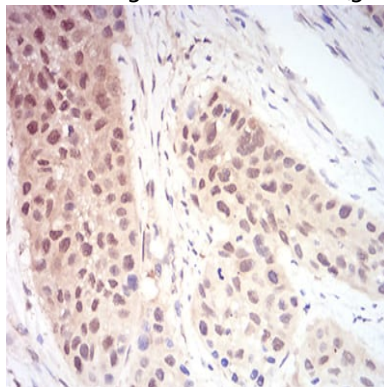


Western blot analysis using RAN mouse mAb against A431 (1), C6 (2), Jurkat (3), Hela (4), COS7 (5), and Jurkat (6) cell lysate.

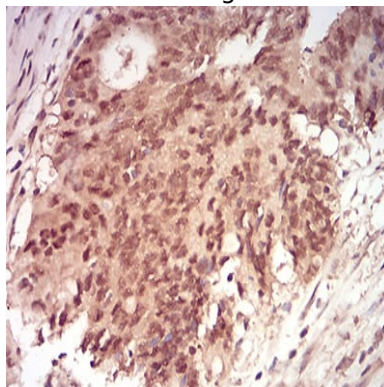
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Flow cytometric analysis of Hela cells using RAN mouse mAb (green) and negative control (red).



Immunohistochemical analysis of paraffin-embedded human esophageal cancer tissues using RAN mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded human rectum cancer tissues using RAN mouse mAb with DAB staining.

## Note

For research use only.