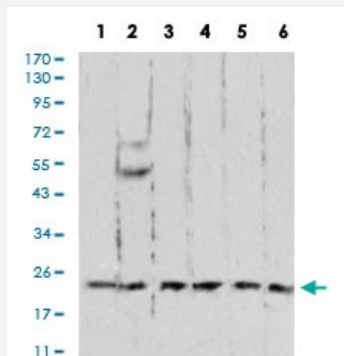


RAN monoclonal antibody, clone 8D1H12

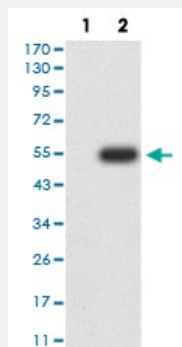
Catalog # MAB17210 Size 100 ug

Applications



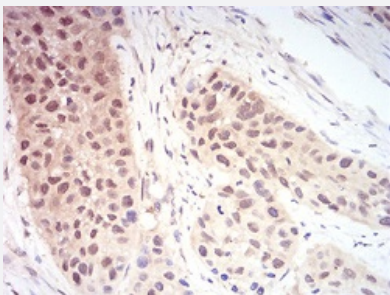
Western Blot (Cell lysate)

Western blot analysis of Lane 1: A431 cell; Lane 2: C6 cell; Lane 3: Jurkat cell; Lane 4: HeLa cell; Lane 5: COS-7 cell; Lane 6: Jurkat cell with RAN monoclonal antibody.



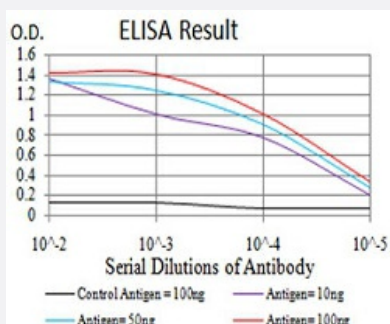
Western Blot (Transfected lysate)

Western Blot analysis of (1) HEK293 cells, (2) RAN-hlgGFc transfected HEK293 cell lysate.



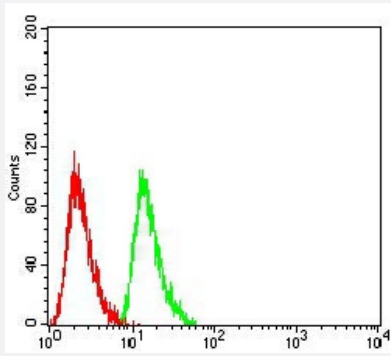
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining of paraffin-embedded esophageal cancer tissues with RAN monoclonal antibody.



Enzyme-linked Immunoabsorbent Assay

ELISA analysis of RAN monoclonal antibody, clone 8D1H12.



Flow Cytometry

Flow cytometric analysis of HeLa cells with RAN monoclonal antibody (green) and negative control (red).

Specification

Product Description	Mouse monoclonal antibody raised against recombinant human RAN.
Immunogen	Recombinant protein corresponding to amino acid 1-216 of human RAN from <i>E. coli</i> .
Host	Mouse
Theoretical MW (kDa)	24.4kDa
Reactivity	Human, Monkey, Rat
Form	Liquid
Isotype	IgG1
Recommend Usage	ELISA (1:10000) Western Blot (1:500-1:2000) Immunohistochemistry (1:200-1:1000) Immunocytochemistry Flow Cytometry (1:200-1:400) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.05% sodium azide).
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

Western blot analysis of Lane 1: A431 cell; Lane 2: C6 cell; Lane 3: Jurkat cell; Lane 4: HeLa cell; Lane 5: COS-7 cell; Lane 6: Jurkat cell with RAN monoclonal antibody.

- Western Blot (Transfected lysate)

Western Blot analysis of (1) HEK293 cells, (2) RAN-hlgGfc transfected HEK293 cell lysate.

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining of paraffin-embedded esophageal cancer tissues with RAN monoclonal antibody.

- Enzyme-linked Immunoabsorbent Assay

ELISA analysis of RAN monoclonal antibody, clone 8D1H12.

- Flow Cytometry

Flow cytometric analysis of HeLa cells with RAN monoclonal antibody (green) and negative control (red).

Gene Info — RAN

Entrez GeneID

[5901](#)

Gene Name

RAN

Gene Alias

ARA24, Gsp1, TC4

Gene Description

RAN, member RAS oncogene family

Omim ID

[601179](#)

Gene Ontology

[Hyperlink](#)

Gene Summary

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. [provided by RefSeq]

Other Designations

OK/SW-cl.81|RanGTPase|guanosine triphosphatase Ran|member RAS oncogene family|ras-related 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](#)