

Anti-Ran Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

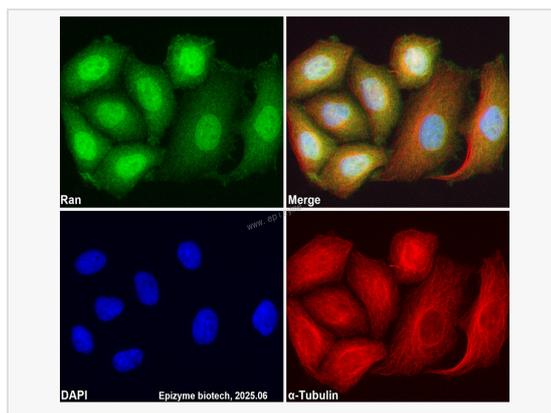
Catalog # R010313

Product Information

Application	WB, IF (Cell)/ICC, ELISA
Reactivity	Human, Rat
Dilution	WB 1:1,000~1:3,000; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	59M38K13
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human Ran
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-Ran Rabbit mAb [59M38K13] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Synonyms	Androgen receptor associated protein 24; Androgen receptor-associated protein 24; ARA 24; ARA24; Gsp1; GTP binding nuclear protein RAN; GTP-binding nuclear protein Ran; GTPase Ran; Guanosine triphosphatase Ran; LPS; OK/SW-cl.81; ran; RAN member RAS oncogene family; RAN_HUMAN; RanGTPase; Ras like protein TC4; Ras related nuclear protein; Ras-like protein TC4; Ras-related nuclear protein; RASL2 8; TC 4; TC4.
Calculated MW	Calculated MW: 24 kDa; Observed MW: 24 kDa
Uniprot ID	P62826
Gene ID	5901
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. [provided by



Immunofluorescence - Anti-Ran Rabbit mAb [59M38K13]

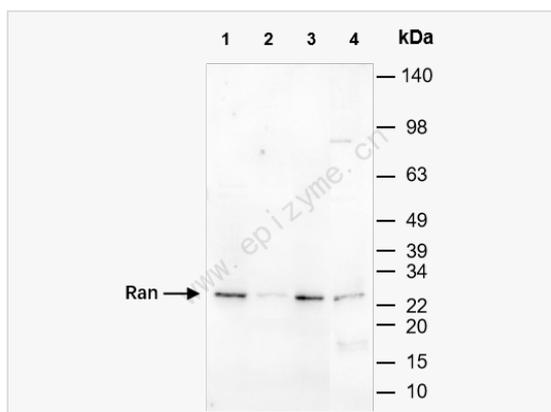
Sample: HeLa cells

The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.

Primary antibodies: R010313 at 1:100 dilution and α -tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution

Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)

Nuclei were stained with DAPI (shown in blue).



Western Blot - Anti-Ran Rabbit mAb [59M38K13]

All lanes: R010313 at 1:3,000 dilution

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: Huh1 (Human hepatocarcinoma epithelial cell) whole cell lysates

Lane 3: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates

Lane 4: PC-12 (Rat adrenal pheochromocytoma epithelial cell) whole cell lysates

Lysates/proteins at 10 μ g per lane.

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution

Predicted band size: 24 kDa

Observed band size: 24 kDa

Developed using the ECL technique (Cat. No. SQ201).