



[Go to Product page](#)

Datasheet for ABIN3021203
anti-RAN antibody (AA 1-216)

4 Images

Overview

Quantity:	100 µL
Target:	RAN
Binding Specificity:	AA 1-216
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This RAN antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	Recombinant fusion protein containing a sequence corresponding to amino acids 1-216 of human Ran (NP_006316.1).
Sequence:	MAAQGEPQVQ FKLVLVGDGG TGKTTFVKRH LTGEFEKKYV ATLGVEVHPL VFHTNRGPIK FNVWDTAGQE KFGGLRDGYI IQAQCAIMF DVTSRVTYKN VPNWHRDLVR VCENIPIVLC GNKVDIKDRK VKAKSIVFHR KKNLQYYDIS AKSNYNFEKP FLWLARKLIG DPNLEFVAMP ALAPPEVMD PALAAQYEHD LEVAQTTALP DEDDDL
Isotype:	IgG
Cross-Reactivity:	Human, Monkey, Mouse, Rat
Characteristics:	Polyclonal Antibodies

Target Details

Target: RAN

Alternative Name: RAN ([RAN Products](#))

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. RAN, ARA24, Gsp1, TC4, Epigenetics & Nuclear Signaling, RNA Binding, Nuclear Receptor Signaling, Signal Transduction, G protein signaling, Signal Transduction, Cell Biology & Developmental Biology, Cell Cycle, Centrosome, RAN

Molecular Weight: 24 kDa

Gene ID: 5901

UniProt: [P62826](#)

Pathways: [Regulatory RNA Pathways](#), [Intracellular Steroid Hormone Receptor Signaling Pathway](#), [Protein targeting to Nucleus](#)

Application Details

Application Notes: WB, 1:500 - 1:2000, IF, 1:50 - 1:200

Restrictions: For Research Use only

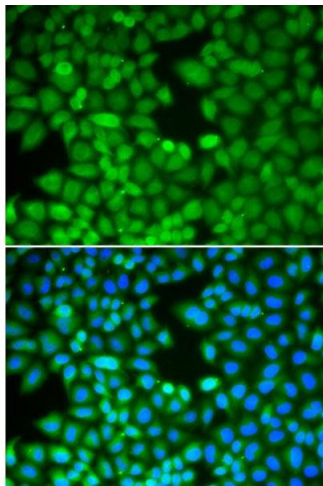
Handling

Format: Liquid

Handling

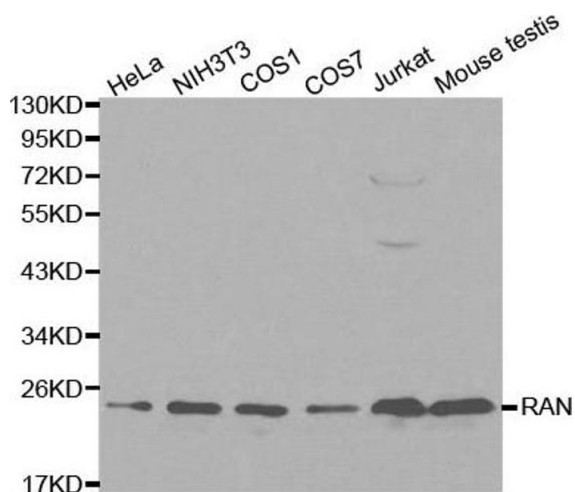
Buffer:	PBS with 0.02 % sodium azide, 50 % glycerol, pH 7.3.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid freeze / thaw cycles
Storage:	-20 °C
Storage Comment:	Store at -20°C. Avoid freeze / thaw cycles.

Images



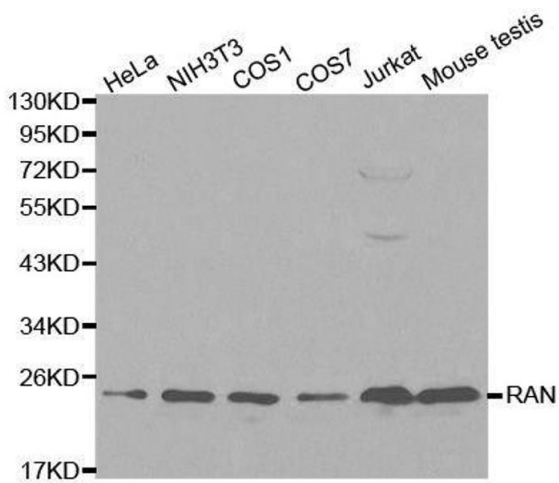
Immunofluorescence

Image 1. Immunofluorescence analysis of MCF-7 cell using RAN antibody. Blue: DAPI for nuclear staining.



Western Blotting

Image 2. Western blot analysis of extracts of various cell lines, using RAN antibody.



Western Blotting

Image 3. Western blot analysis of extracts of various cell lines, using RAN antibody.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN3021203.