

Datasheet for ABIN3032430  
**anti-RAN antibody (AA 112-140)**

## 5 Images

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## Overview

Quantity:	0.4 mL
Target:	RAN
Binding Specificity:	AA 112-140
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This RAN antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Flow Cytometry (FACS)

## Product Details

Immunogen:	A portion of amino acids 112-140 from the human protein was used as the immunogen for this RAN antibody.
Isotype:	Ig Fraction
Cross-Reactivity (Details):	Expected species reactivity: Rat, Bovine, Primate, Chicken, Zebrafish, Xenopus, Drosophila
Purification:	Antigen affinity purified

## Target Details

Target:	RAN
Alternative Name:	RAN ( <a href="#">RAN Products</a> )
Background:	RAN (ras-related nuclear protein) is a small GTP binding protein belonging to the RAS

## Target Details

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.

UniProt: [P62826](#)

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

## Application Details

Application Notes: Titration of the RAN antibody may be required due to differences in protocols and secondary/substrate sensitivity. Western blot: 1:1000, IHC (Paraffin): 1:50-1:100, Flow Cytometry: 1:10-1:50

Restrictions: For Research Use only

## Handling

Format: Liquid

Buffer: In 1X PBS, pH 7.4, with 0.09 % sodium azide

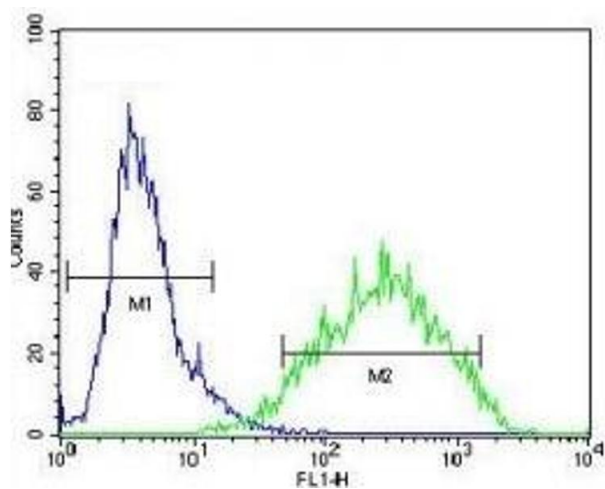
Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: -20 °C

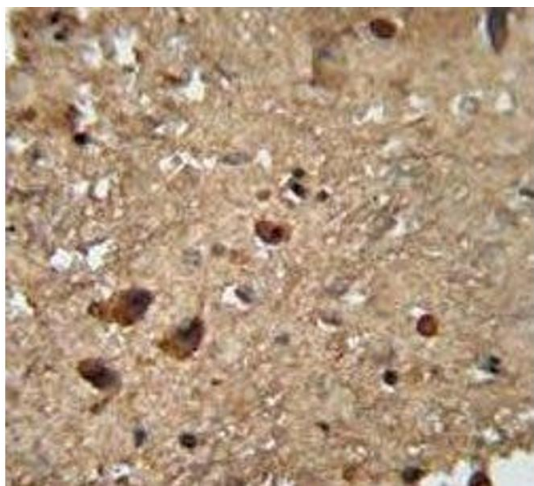
Storage Comment: Aliquot the RAN antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw

cycles.



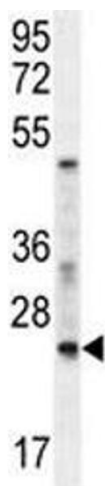
Flow Cytometry

**Image 1.** RAN antibody flow cytometric analysis of NIH3T3 cells (green) compared to a negative control (blue). FITC-conjugated goat-anti-rabbit secondary Ab was used for the analysis.



Immunohistochemistry

**Image 2.** RAN antibody immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue.



Western Blotting

**Image 3.** RAN antibody western blot analysis in mouse NIH3T3 lysate.

Please check the [product details page](#) for more images. Overall 5 images are available for ABIN3032430.