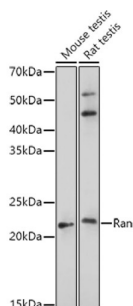


## GTP-Binding Nuclear Protein RAN (RAN) Antibody

Catalogue No.: abx000929



Western blot analysis of various lysates using Ran Antibody at 1/500 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) at 1/10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Exposure time: 30s.

RAN Antibody is a Rabbit Polyclonal antibody against RAN. 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.

**Target:** GTP-Binding Nuclear Protein RAN (RAN)

**Clonality:** Polyclonal

**Reactivity:** Mouse, Rat

**Tested Applications:** ELISA, WB, IF/ICC

**Host:** Rabbit

**Recommended dilutions:** ELISA: 1 µg/ml, WB: 1/500 - 1/1000, IF/ICC: 1/50 - 1/200. Optimal dilutions/concentrations should be determined by the end user.

**Conjugation:** Unconjugated

**Immunogen:** Recombinant fusion protein containing a sequence corresponding to amino acids 1-216 of human Ran.

**Isotype:** IgG

**Form:** Liquid

# Datasheet

Version: 4.0.0  
Revision date: 13 Jun 2025



<b>Purification:</b>	Purified by affinity chromatography.
<b>Storage:</b>	Aliquot and store at -20°C. Avoid repeated freeze/thaw cycles.
<b>UniProt Primary AC:</b>	P62826 ( <a href="#">UniProt</a> , <a href="#">ExPASy</a> )
<b>Gene Symbol:</b>	RAN
<b>GeneID:</b>	<a href="#">5901</a>
<b>NCBI Accession:</b>	NP_006316.1
<b>KEGG:</b>	hsa:5901
<b>String:</b>	<a href="#">9606.ENSP00000446215</a>
<b>Molecular Weight:</b>	Calculated MW: 24 kDa Observed MW: 24 kDa
<b>Buffer:</b>	PBS, pH 7.3, containing 0.02% sodium azide, 50% glycerol.
<b>Concentration:</b>	> 0.2 mg/ml
<b>Note:</b>	THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC, THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION.