

DATASHEET

RAN Rabbit Polyclonal Antibody

CAT. NO. APA07483

KEY FEATURES

Target	RAN	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat, Bovine, Dog, Monkey	Clonality	Polyclonal
Applications	WB, IHC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at-20°C

BACKGROUND

GTPase involved in nucleocytoplasmic transport, participating both to the import and the export from the nucleus of proteins and RNAs . Switches between a cytoplasmic GDP- and a nuclear GTP-bound state by nucleotide exchange and GTP hydrolysis . Nuclear import receptors such as importin beta bind their substrates only in the absence of GTP-bound RAN and release them upon direct interaction with GTP-bound RAN, while export receptors behave in the opposite way. Thereby, RAN controls cargo loading and release by transport receptors in the proper compartment and ensures the directionality of the transport . Interaction with RANBP1 induces a conformation change in the complex formed by XPO1 and RAN that triggers the release of the nuclear export signal of cargo proteins .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:100 - 1:200

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to RAN
Specificity	Recognizes endogenous levels of RAN protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human RAN. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 24 kD; Observed: 24 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	ARA24; GTP-binding nuclear protein Ran; Androgen receptor-associated protein 24; GTPase Ran; Ras-like protein TC4; Ras-related nuclear protein
Gene Symbol	RAN
Entrez Gene	5901(Human); 102641332; 19384(Mouse); 84509(Rat)
SwissProt	P62826(Human); P62827(Mouse); P62828(Rat)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

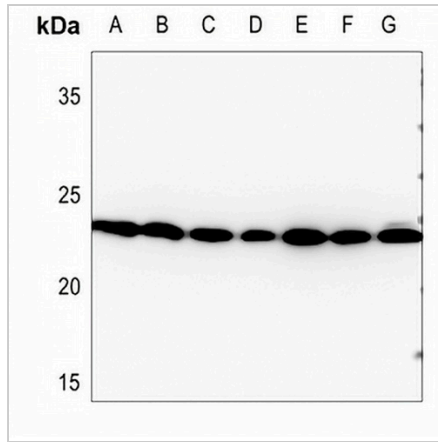
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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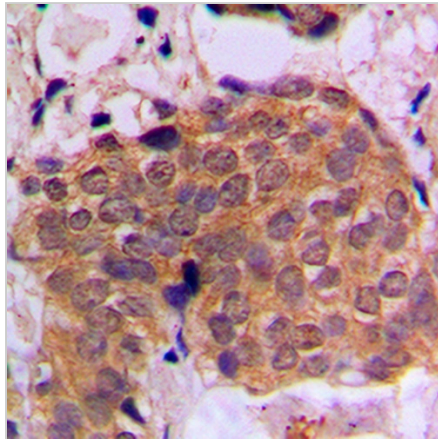
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Western blot analysis of RAN expression in LOVO (A), Jurkat (B), U2OS (C), mouse lung (D), mouse testis (E), rat lung (F), rat testis (G) whole cell lysates. (Predicted band size: 24 kD; Observed band size: 24 kD)



Immunohistochemical analysis of RAN staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.