

Product datasheet for **AP06300PU-M**

RAN Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	Western blot: 1/500 - 1/1000. Immunohistochemistry on paraffin sections: 1/50 - 1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to amino acids 170-200 of Human RAN.
Specificity:	RAN antibody detects endogenous levels of RAN protein. (region surrounding E202)
Formulation:	PBS, pH7.2. State: Aff - Purified State: Liquid purified Ig fraction Preservative: 0.05% sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 25 kDa
Gene Name:	RAN, member RAS oncogene family
Database Link:	Entrez Gene 5901 Human P62826



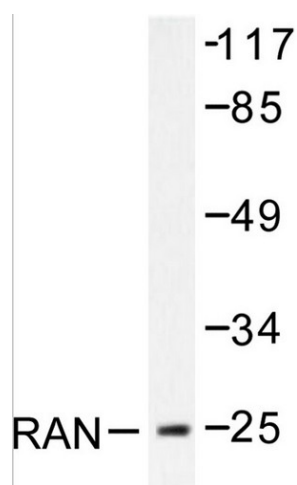
[View online »](#)

Background:

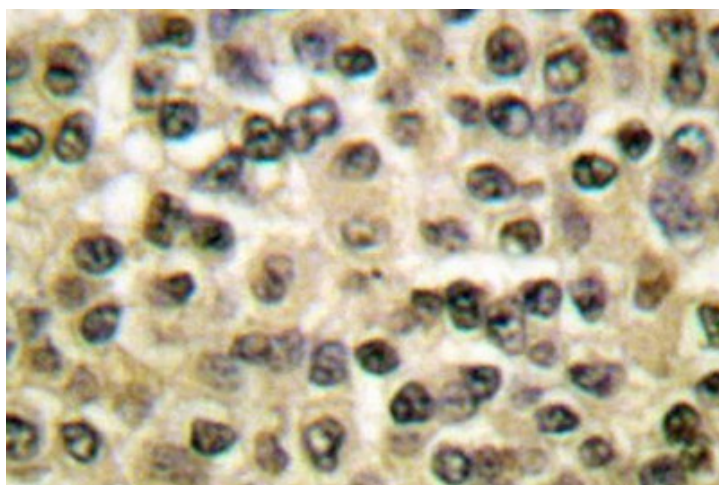
The small Ras-related protein Ran, also called TC4, is a 24 kDa, nuclear localized GTPase implicated in a diverse array of cellular processes including DNA replication, entry into and exit from mitosis and the transport of RNA and proteins through the nuclear pore complex. Like Ras, active Ran GTP and inactive Ran GDP levels are tightly regulated by guanine nucleotide exchange factors (GEFs) and GTPase activating proteins (GAPs). The abundant GEF, RCC1 (regulator of chromosome condensation 1), increases the rate at which Ran exchanges GDP for GTP. Ran GAP1 opposes the effects of RCC1 by increasing the rate at which Ran hydrolyzes GTP to GDP. A 23 kDa protein designated Ran BP1 has no intrinsic GAP activity, and functions as a GEF inhibitor deactivating RCC1 and thereby indirectly increasing the ratio of Ran GDP to Ran GTP. The 358 kDa protein Ran BP2 has been proposed as the Ran GTP docking site at the periphery of the nuclear pore complex.

Synonyms:

GTPase Ran, ARA24

Product images:


Western blot (WB) analysis of RAN antibody in extracts from LOVO cells.



Immunohistochemistry (IHC) analyzes of RAN antibody in paraffin-embedded human breast carcinoma tissue.