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Product datasheet for TA322509

RAN Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 200-1000 WB positive control: Hela, NIH/3T3 and HepG2 cells, Mouse testis tissue IHC: 25-100 Positive control: Human liver cancer Predicted cell location: Cytoplasm, Nucleus
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide corresponding to a region derived from 200-216 amino acids of Human Ras-related nuclear protein
Formulation:	PBS pH7.3, 0.05% NaN3, 50% glycerol
Concentration:	lot specific
Purification:	Antigen affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	25 kDa
Gene Name:	RAN, member RAS oncogene family
Database Link:	NP_006316 Entrez Gene 19384 MouseEntrez Gene 84509 RatEntrez Gene 5901 Human P62826

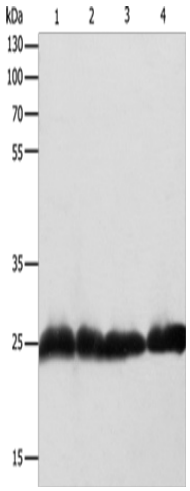
View online »

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.

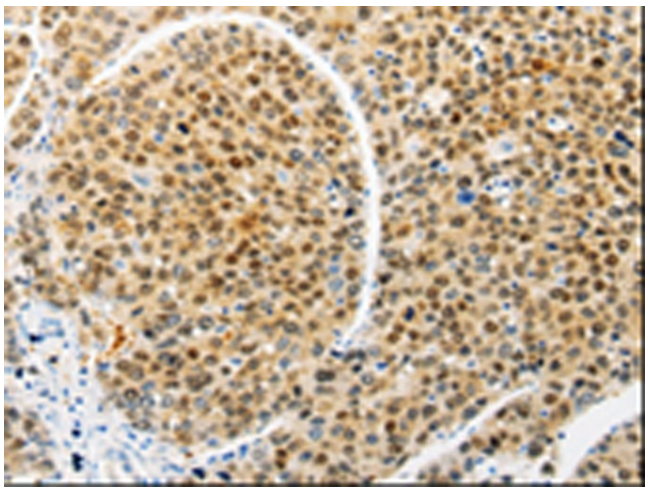
Synonyms: ARA24; Gsp1; TC4

Protein Families: Druggable Genome, Transcription Factors

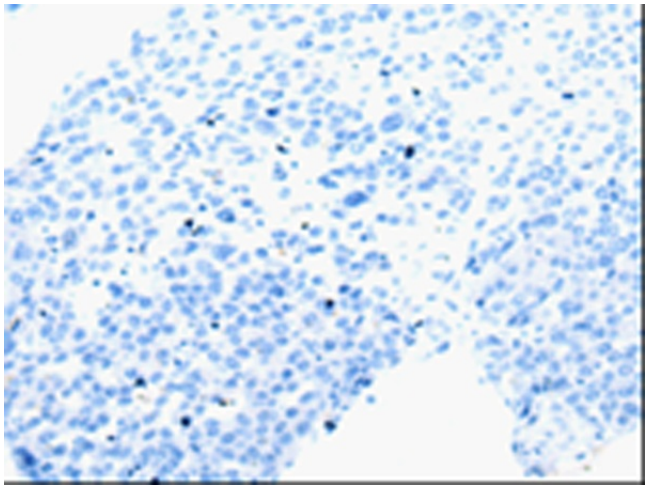
Product images:



Gel: 10%SDS-PAGE
Lysate: 30 µg
Lane 1-4: Hela cells
NIH/3T3 cells
HepG2 cells
Mouse testis tissue
Primary antibody: TA322509 (RAN Antibody) at dilution 1/200
Secondary antibody: Goat anti rabbit IgG at 1/8000 dilution
Exposure time: 1 minute



Immunohistochemistry of paraffin-embedded Human liver cancer tissue using TA322509 (RAN Antibody) at dilution 1/10 (Original magnification: ×200)



Immunohistochemistry of paraffin-embedded Human liver cancer tissue using TA322509 (RAN Antibody) at dilution 1/10, treated with synthetic peptide. (Original magnification: ×200)