



Human RAN blocking peptide (CDBP2468)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Blocking/Immunizing peptide for anti-RAN antibody
Antigen Description	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. [provided by RefSeq, Jul 2008]
Species	Human
Conjugate	Unconjugated
Applications	Apuri, BL, ELISA
Format	Lyophilized powder
Size	100 µg
Preservative	None
Storage	Shipped at ambient temperature, store at -20°C.

GENE INFORMATION

Gene Name	RAN RAN, member RAS oncogene family [Homo sapiens]
Official Symbol	RAN
Synonyms	RAN; RAN, member RAS oncogene family; GTP-binding nuclear protein Ran; ARA24; Gsp1; TC4; RanGTPase; GTPase Ran; OK/SW-cl.81; ras-like protein TC4; member RAS oncogene family; ras-related nuclear protein; guanosine triphosphatase Ran; androgen receptor-associated protein 24;
Entrez Gene ID	5901
mRNA Refseq	NM_006325
Protein Refseq	NP_006316
UniProt ID	P62826
Chromosome Location	12
Pathway	Androgen Receptor Signaling Pathway, organism-specific biosystem; Aurora A signaling, organism-specific biosystem; Canonical NF-kappaB pathway, organism-specific biosystem; Disease, organism-specific biosystem; Export of Viral Ribonucleoproteins from Nucleus, organism-specific biosystem; FoxO family signaling, organism-specific biosystem; Gene Expression, organism-specific biosystem;
Function	GTP binding; GTPase activity; androgen receptor binding; chromatin binding; nucleotide binding; protein binding; transcription coactivator activity;