



Anti-RAN (full length) polyclonal antibody (DPAB-DC2661)

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

PRODUCT INFORMATION

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 Kennedys 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 Kennedys disease.
Immunogen	RAN (AAH16654, 1 a.a. ~ 216 a.a) full-length recombinant protein with GST tag. The sequence is MAAQGEPVQVQFKLVLVGDGGTGKTTFVKRHLTGEFEKKYVATLGVEVHPLVFHTNRGPIKFNVWDTAGQEKFGLRDGYIQAQCAIIMFDVTSRVTYKNVPNWRDLVRVCENIPIVLCGNKVDIKDRKVKAKSIVFHRKKNLQYYDISAKSNYNFEKPFLWLARKLIGDPNLEFVAMPALAPPEVVMDPALAAQYEHDLEVAQTTALPDEDDDL
Source/Host	Mouse
Species Reactivity	Human
Conjugate	Unconjugated
Applications	WB (Cell lysate), WB (Recombinant protein), ELISA,

Size	50 μ l
Buffer	50 % glycerol
Preservative	None
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

GENE INFORMATION

Gene Name	RAN RAN, member RAS oncogene family [Homo sapiens (human)]
Official Symbol	RAN
Synonyms	RAN; RAN, member RAS oncogene family; TC4; Gsp1; ARA24; GTP-binding nuclear protein Ran; 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
Protein Refseq	NP_006316
UniProt ID	B4DV51
Chromosome Location	12q24.3
Pathway	Androgen receptor signaling pathway; Canonical NF-kappaB pathway; Epstein-Barr virus infection; Export of Viral Ribonucleoproteins from Nucleus
Function	GTP binding; GTPase activity; androgen receptor binding; chromatin binding