

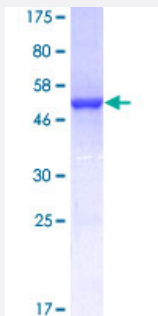
Full-Length

RAN (Human) Recombinant Protein (P01)

Catalog # H00005901-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human RAN full-length ORF (AAH16654, 1 a.a. - 216 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MAAQGEPQVQFKLVLVGDGGTGKTTFVKRHLTGEFEKKYVATLGVEVHPLVFHTNRGPIKFNVW
DTAGQEKFGLRDGYIQAQCAIIMFDVTSRVTYKNVPNWHRDLVRVCENIPVLCGNKVDIKDRKV
KAKSIVFHRKKNLQYYDISAKSNYNFEKPFLWLARKLIGDPNLEFVAMPALAPPEVMDPALAAQY
EHDLEVAQTTALPDEDDDL

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

49.5

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue.

Storage Buffer

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

Storage Instruction

Store at -80°C. Aliquot to avoid repeated freezing and thawing.

Note

Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — RAN

Entrez GeneID [5901](#)

GeneBank Accession# [BC016654](#)

Protein Accession# [AAH16654](#)

Gene Name RAN

Gene Alias ARA24, Gsp1, TC4

Gene Description RAN, member RAS oncogene family

Omim ID [601179](#)

Gene Ontology [Hyperlink](#)

Gene Summary

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]

Other Designations OK/SW-cl.81|RanGTPase|guanosine triphosphatase Ran|member RAS oncogene family|ras-related nuclear protein

Disease

- [Adenocarcinoma](#)
- [Carcinoma](#)
- [Esophageal Neoplasms](#)
- [Fetal Membranes](#)
- [Genetic Predisposition to Disease](#)
- [Head and Neck Neoplasms](#)
- [Kidney Neoplasms](#)
- [Lung Neoplasms](#)
- [Mouth Neoplasms](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Precancerous Conditions](#)
- [Premature Birth](#)