

## Product datasheet for **TP308738M**

### RAN (NM\_006325) Human Recombinant Protein

#### Product data:

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human RAN, member RAS oncogene family (RAN), 100 µg

**Species:** Human

**Expression Host:** HEK293T

**Expression cDNA Clone or AA Sequence:** >RC208738 protein sequence  
**Red**=Cloning site **Green**=Tags(s)

MAAQGEPQVQFKLVLVGDGGTGKTFVVKRHLTGEFEKKYVATLGVEVHPLVFHTNTRGPIKFNVWDTAGQE  
KFGGLRDGYIQAQCAIIMFDVTSRVTYKNVPNWHRDLVRCENIPIVLCGNKVDIKDRKVKAKSIVFHR  
KKNLQYYDISAKSNYNFEKPFLWLARKLIGDPNLEFVAMPALAPPEVMDPALAAQYEHDLVAQTALP  
DEDDDL

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Tag:** C-Myc/DDK

**Predicted MW:** 24.2 kDa

**Concentration:** >0.05 µg/µL as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.

**Storage:** Store at -80°C.

**Stability:** Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** [NP\\_006316](#)

**Locus ID:** 5901

**UniProt ID:** [P62826](#)



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RefSeq Size: 2546

Cytogenetics: 12q24.33

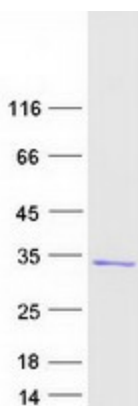
RefSeq ORF: 648

Synonyms: ARA24; Gsp1; TC4

**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, Jul 2008]

**Protein Families:** Druggable Genome, Transcription Factors

### Product images:



Coomassie blue staining of purified RAN protein (Cat# [TP308738]). The protein was produced from HEK293T cells transfected with RAN cDNA clone (Cat# [RC208738]) using MegaTran 2.0 (Cat# [TT210002]).