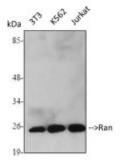


## Anti-Ran antibody





Model STJ95363

**Host** Rabbit

**Reactivity** Human, Mouse, Rat

**Applications** ELISA, IHC, WB

ImmunogenSynthesized peptide derived from human Ran

**Immunogen Region** 140-220 aa, C-terminal

**Gene ID** <u>5901</u>

Gene Symbol RAN

**Dilution range** WB 1:500-1:2000IHC 1:100-1:300ELISA 1:10000

**Specificity** Ran Polyclonal Antibody detects endogenous levels of Ran protein.

**Tissue Specificity** Expressed in a variety of tissues.

**Purification** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

**Note** For Research Use Only (RUO).

**Protein Name** GTP-binding nuclear protein Ran Androgen receptor-associated protein 24

GTPase Ran Ras-like protein TC4 Ras-related nuclear protein

Molecular Weight 25 kDa

**Clonality** Polyclonal

**Conjugation** Unconjugated

**Isotype** IgG

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Concentration** 1 mg/ml

**Storage Instruction** Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:9846OMIM:601179</u>

Alternative Names GTP-binding nuclear protein Ran Androgen receptor-associated protein 24

GTPase Ran Ras-like protein TC4 Ras-related nuclear protein

**Function** GTPase involved in nucleocytoplasmic transport, participating both to the

import and the export from the nucleus of proteins and RNAs. Switches between a cytoplasmic GDP- and a nuclear GTP-bound state by nucleotide exchange and GTP hydrolysis. Nuclear import receptors such as importin beta bind their substrates only in the absence of GTP-bound RAN and release them upon direct interaction with GTP-bound RAN while export receptors behave in the opposite way. Thereby, RAN controls cargo loading and release by transport receptors in the proper compartment and ensure the directionality of the transport. The complex with BIRC5/survivin plays a role in mitotic spindle formation by serving as a physical scaffold to help deliver the RAN effector molecule TPX2 to microtubules . Acts as a negative regulator of the kinase activity of VRK1 and VRK2 . Enhances AR-mediated transactivation. Transactivation decreases as the poly-Gln length within AR increases .

Cellular Localization Nucleus Nucleus envelope Cytoplasm Melanosome. Predominantly nuclear

during interphase. Becomes dispersed throughout the cytoplasm during mitosis. Identified by mass spectrometry in melanosome fractions from stage I

to stage IV.

St John's Laboratory Ltd

**F** +44 (0)207 681 2580 **T** +44 (0)208 223 3081

W http://www.stjohnslabs.com/ E info@stjohnslabs.com