

## RAN RABBIT PAB

**Cat.#:** S219648

**Product Name:** Anti-RAN Rabbit Polyclonal Antibody

**Synonyms:** TC4, Gsp1, ARA24

**UNIPROT ID:** P62826 (Gene Accession - NP\_006316 )

**Background:** 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.

**Immunogen:** Synthetic peptide of human RAN

**Applications:** ELISA, WB, IHC

**Recommended Dilutions:** IHC: 25-100;WB: 200-1000;ELISA: 1000-5000

**Host Species:** Rabbit

**Clonality:** Rabbit Polyclonal

**Isotype:** Immunogen-specific rabbit IgG

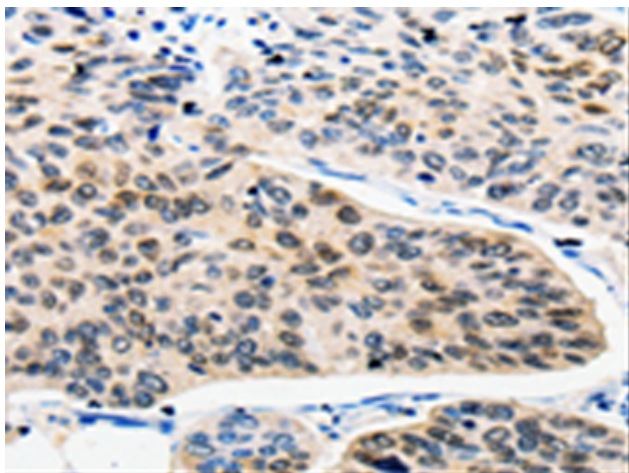
**Purification:** Antigen affinity purification

**Species Reactivity:** Human, Mouse, Rat

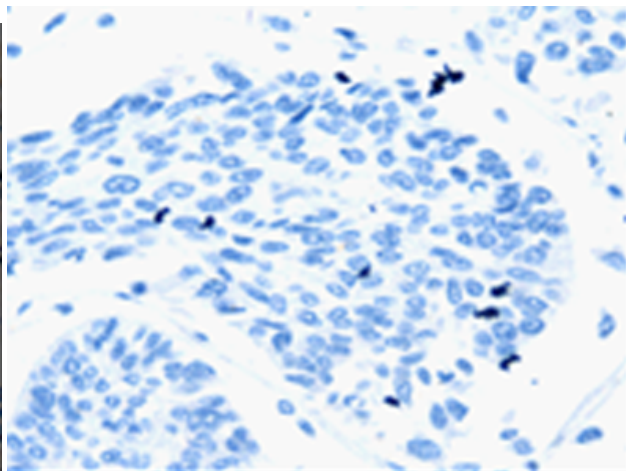
**Constituents:** PBS (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150 mM NaCl, 0.05% Sodium Azide and 40% glycerol

**Research Areas:** Signal Transduction, Epigenetics and Nuclear Signaling, Cancer

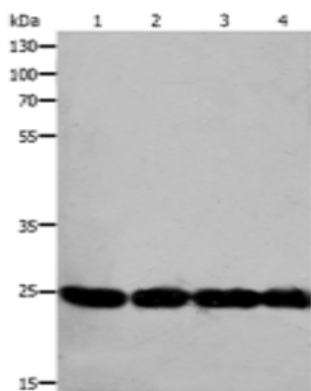
**Storage & Shipping:** Store at -20°C. Avoid repeated freezing and thawing



Immunohistochemistry analysis of paraffin embedded Human lung cancer tissue using 219648(RAN Antibody) at a dilution of 1/25(Cytoplasm, Nucleus).



In comparison with the IHC on the left, the same paraffin-embedded Human lung cancer tissue is first treated with the synthetic peptide and then with 219648(Anti-RAN Antibody) at dilution 1/25.



Gel: 10%SDS-PAGE, Lysate: 30  $\mu$ g;  
Lane 1-4: Hela cells, NIH/3T3 cells, HepG2 cells,  
Mouse testis tissue;  
Primary antibody: 219648(RAN Antibody) at  
dilution 1/400;  
Secondary antibody: Goat anti rabbit IgG at  
1/8000 dilution;  
Exposure time: 1 minute