



Rabbit Anti-ARA24 antibody

SL3751R

Product Name:	ARA24
Chinese Name:	雄激素受体相关蛋白24抗体
Alias:	Ran; Androgen receptor associated protein 24; ARA 24; ARA24; Gsp1; GTP binding nuclear protein RAN; GTPase Ran; LPS; RAN member RAS oncogene family; Ras like protein TC4; Ras related nuclear protein; RASL2 8; TC 4; TC4; RAN_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	24kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human ARA24:101-200/216
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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.

Function:

GTP-binding protein involved in nucleocytoplasmic transport. Required for the import of protein into the nucleus and also for RNA export. Involved in chromatin condensation and control of cell cycle (By similarity). The complex with BIRC5/ surviving 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.

Subunit:

Monomer. Also forms a complex with CHC1 and interacts with the AR N-terminal poly-Gln region. The interaction with AR is inversely correlated with the poly-Gln length. Part of a complex consisting of RANBP9, Ran, DYRK1B and COPS5. Found in a nuclear export complex with RANBP3 and XPO1. Component of a nuclear export receptor complex composed of KPNB1, Ran, SNUPN and XPO1. Found in a trimeric export complex with SNUPN, Ran and XPO1. Interacts with RANBP10. In case of HIV-1 infection, found in a complex with HIV-1 Rev, RNAs containing a Rev response element (RRE) and XPO1. Found in a complex with HTLV-1 Rex, RANBP3 and XPO1. Interacts in its GTP-bound form with BIRC5/survivin at S and M phases of the cell cycle. Interacts with TERT; the interaction requires hydrogen peroxide-mediated phosphorylation of TERT and transports TERT to the nucleus. Interacts with MAD2L2. Interacts with RANBP10 (By similarity). Interacts with VRK1 and VRK3. Interacts with isoform 1 and isoform 2 of VRK2.

Subcellular Location:

Nucleus. Cytoplasm. Melanosome.

Tissue Specificity:

Expressed in a variety of tissues.

Similarity:

Belongs to the small GTPase superfamily. Ran family.

SWISS:
P62826

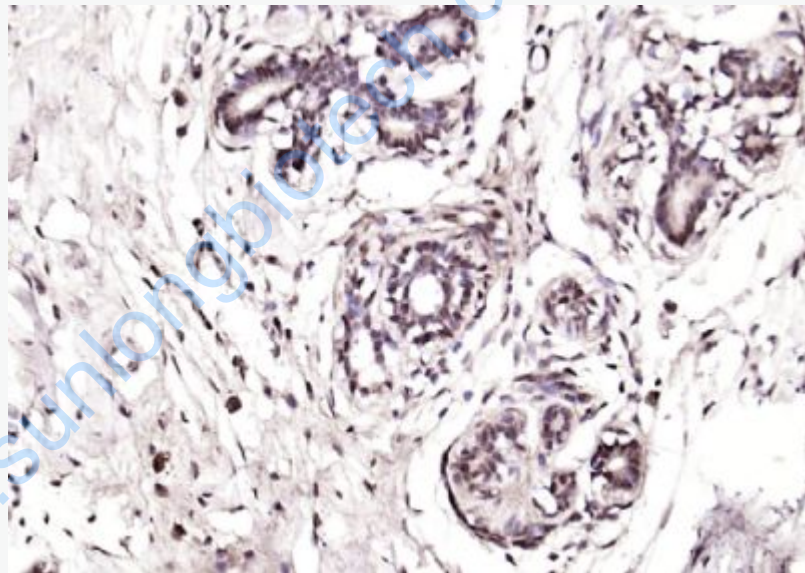
Gene ID:
5901

Database links:
UniProtKB/Swiss-Prot: P62826.3

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Ran是真核细胞中含量极丰富的小分子的GTP酶, 在核转运过程中具有十分重要的作用。Ran主要参与了物质的核浆转运。

Picture:



Paraformaldehyde-fixed, paraffin embedded (human breast); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ARA24) Polyclonal Antibody, Unconjugated (SL3751R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.