

# RAB1A antibody - middle region

Rabbit Polyclonal Antibody Catalog # AI13962

#### **Product Information**

Application WB, IHC Primary Accession P62820

Other Accession <u>NM 004161, NP 004152</u>

**Reactivity** Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Goat, Dog, Guinea Pig, Horse,

Bovine

**Predicted** Human, Mouse, Rat, Rabbit, Pig, Chicken, Dog, Bovine

HostRabbitClonalityPolyclonalCalculated MW22678

## **Additional Information**

**Gene ID** 5861

Alias Symbol DKFZP564B163, RAB1, YPT1

Other Names Ras-related protein Rab-1A, YPT1-related protein, RAB1A, RAB1

Format Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium

azide and 2% sucrose.

**Reconstitution & Storage** Add 50 ul of distilled water. Final anti-RAB1A antibody concentration is 1

mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at

20°C. Avoid repeat freeze-thaw cycles.

**Precautions** RAB1A antibody - middle region is for research use only and not for use in

diagnostic or therapeutic procedures.

#### **Protein Information**

Name RAB1A

Synonyms RAB1

**Function** The small GTPases Rab are key regulators of intracellular membrane

trafficking, from the formation of transport vesicles to their fusion with membranes (PubMed:20639577, PubMed:20861236, PubMed:21303926, PubMed:22939626). Rabs cycle between an inactive GDP- bound form and an active GTP-bound form that is able to recruit to membranes different sets of downstream effectors directly responsible for vesicle formation, movement,

tethering and fusion (PubMed: 20639577, PubMed: 20861236,

PubMed: 21303926, PubMed: 22939626). RAB1A regulates vesicular protein

transport from the endoplasmic reticulum (ER) to the Golgi compartment and on to the cell surface, and plays a role in IL-8 and growth hormone secretion (PubMed:21303926). Required to modulate the compacted morphology of the Golgi (PubMed:26209634). Regulates the level of CASR present at the cell membrane (PubMed:20861236). Plays a role in cell adhesion and cell migration, via its role in protein trafficking (PubMed:20639577). Plays a role in autophagosome assembly and cellular defense reactions against pathogenic bacteria (PubMed:22939626). Plays a role in microtubule-dependent protein transport by early endosomes and in anterograde melanosome transport (By similarity).

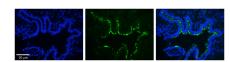
#### **Cellular Location**

Golgi apparatus. Endoplasmic reticulum. Early endosome. Cytoplasm, cytosol. Membrane. Melanosome {ECO:0000250|UniProtKB:P62821}. Note=Alternates between membrane- associated and cytosolic forms.

### References

Zahraoui A.,et al.J. Biol. Chem. 264:12394-12401(1989). Wiemann S.,et al.Genome Res. 11:422-435(2001). Bechtel S.,et al.BMC Genomics 8:399-399(2007). Ota T.,et al.Nat. Genet. 36:40-45(2004). Puhl H.L. III,et al.Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases.

## **Images**



Rabbit Anti-RAB1A Antibody Catalog Number: AI13962

Formalin Fixed Paraffin Embedded Tissue: Human Bronchial Epithelial Tissue Observed Staining:

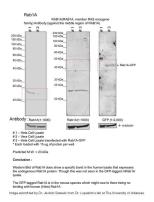
Cytoplasmic in excellent staining

Primary Antibody Concentration: 1:100

Secondary Antibody: Donkey anti-Rabbit-Cy3

Secondary Antibody Concentration: 1:200 Magnification: 20X

Exposure Time: 0.5 - 2.0 sec



Sample Type: 1. Human Cervical Cancer cell lysate (15ug) 2. Monkey Fibroblast cell lysate (15ug) 3. Human Cervical Cancer Cell transfected with Rab1A-GFP (15ug) Primary Dilution: 1:1000 Secondary Antibody: goat anti-Rabbit Secondary Dilution: 1:40,000 Image Submitted by: Dr. Jakob Szwedo, Dr. Lupashin's Lab University of Arkansas for Medical SciencesSee Customer Feedback tab for detailed information.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.