

RAB3GAP1 Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP10389c**Specification**

RAB3GAP1 Antibody (Center) Blocking peptide - Product Information

Primary Accession [O15042](#)
Other Accession [NP_036365.1](#)

RAB3GAP1 Antibody (Center) Blocking peptide - Additional Information

Gene ID 22930

Other Names

Rab3 GTPase-activating protein catalytic subunit, RAB3 GTPase-activating protein 130 kDa subunit, Rab3-GAP p130, Rab3-GAP, RAB3GAP1, KIAA0066, RAB3GAP

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

RAB3GAP1 Antibody (Center) Blocking peptide - Protein Information

Name RAB3GAP1

Synonyms KIAA0066, RAB3GAP

Function

Catalytic subunit of the Rab3 GTPase-activating (Rab3GAP) complex composed of RAB3GAP1 and RAB3GAP2, which has GTPase-activating protein (GAP) activity towards various Rab3 subfamily members (RAB3A, RAB3B, RAB3C and RAB3D), RAB5A and RAB43, and guanine nucleotide exchange factor (GEF) activity towards RAB18 (PubMed:9030515, PubMed:10859313, PubMed:24891604). As part of the Rab3GAP complex, acts as a GAP for Rab3 proteins by converting active RAB3-GTP to the inactive form RAB3-GDP (PubMed:10859313). Rab3 proteins are involved in regulated exocytosis of neurotransmitters and hormones (PubMed:15696165). The Rab3GAP complex, acts as a GEF for RAB18 by promoting the conversion of inactive RAB18-GDP to the active form RAB18-GTP (PubMed:24891604). Required for

recruiting and activating RAB18 at the endoplasmic reticulum (ER) membrane where it maintains proper ER structure (PubMed:24891604). Required for normal eye and brain development (PubMed:15696165, PubMed:23420520). May participate in neurodevelopmental processes such as proliferation, migration and differentiation before synapse formation, and non-synaptic vesicular release of neurotransmitters (PubMed:9030515, PubMed:9852129).

Cellular Location

Cytoplasm. Endoplasmic reticulum. Note=In neurons, it is enriched in the synaptic soluble fraction.

Tissue Location

Ubiquitous..

RAB3GAP1 Antibody (Center) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

RAB3GAP1 Antibody (Center) Blocking peptide - Images**RAB3GAP1 Antibody (Center) Blocking peptide - Background**

This gene encodes the catalytic subunit of a Rab GTPaseactivating protein. The encoded protein forms a heterodimer with anon-catalytic subunit to specifically regulate the activity ofmembers of the Rab3 subfamily of small G proteins. This proteinmediates the hydrolysis of GTP bound Rab3 to the GDP bound form.Mutations in this gene are associated with Warburg micro syndrome.Alternate splicing results in multiple transcript variants.

RAB3GAP1 Antibody (Center) Blocking peptide - References

Ishibashi, K., et al. Genes Cells 14(1):41-52(2009)Abdel-Salam, G.M., et al. Genet. Couns. 18(4):423-435(2007)Olsen, J.V., et al. Cell 127(3):635-648(2006)Itoh, T., et al. Genes Cells 11(9):1023-1037(2006)Aligianis, I.A., et al. Nat. Genet. 37(3):221-223(2005)