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Anti-RAB3GAP1 Antibody

Catalog # AP51827

Product Information

Application	WB, IHC
Primary Accession	Q15042
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	110524

Additional Information

Gene ID	22930
Other Names	KIAA0066; RAB3GAP; Rab3 GTPase-activating protein catalytic subunit; RAB3 GTPase-activating protein 130 kDa subunit; Rab3-GAP p130; Rab3-GAP
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human RAB3GAP1. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	RAB3GAP1 (HGNC:17063)
Synonyms	KIAA0066, RAB3GAP
Function	Catalytic subunit of the Rab3 GTPase-activating (Rab3GAP) complex composed of RAB3GAP1 and RAB3GAP2, which accelerates the otherwise slow GTP hydrolysis catalyzed by Rab proteins (PubMed:9030515, PubMed:10859313, PubMed:39779760). Has GTPase- activating protein (GAP) activity towards various Rab3 subfamily members (RAB3A, RAB3B, RAB3C and RAB3D), RAB5A and RAB43 (PubMed:10859313, PubMed:9030515, PubMed:39779760). Additionally, it has guanine nucleotide exchange factor (GEF) activity towards RAB18, promoting GDP release from RAB18 and the conversion of inactive RAB18- GDP to the active form RAB18-GTP (PubMed:24891604, PubMed:39779760). Recruits and stabilizes RAB18 at the cis-Golgi membrane in fibroblasts where RAB18 is most likely activated (PubMed:26063829). Also involved in RAB18 recruitment 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 cell proliferation, migration and differentiation before synapse formation, and is involved in regulating non-synaptic vesicular release of neurotransmitters (PubMed:9030515, PubMed:9852129).

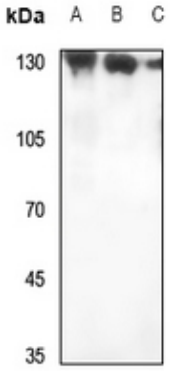
Cellular Location Cytoplasm. Endoplasmic reticulum. Golgi apparatus, cis-Golgi network. Note=In neurons, enriched in the synaptic soluble fraction. Localized to the cis-Golgi in fibroblasts (PubMed:26063829).

Tissue Location Ubiquitous..

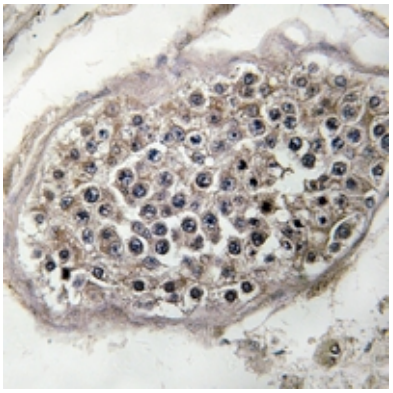
References

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Images



Western blot analysis of RAB3GAP1 expression in HEK293T (A), Hela (B), H446 (C) whole cell lysates. (Predicted band size: 110 kD; Observed band size: 130 kD)



Immunohistochemical analysis of RAB3GAP1 staining in human testis formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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