

RAB3GAP1 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51827

Product Information

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

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
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
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
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..

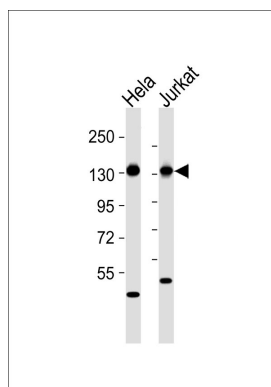
Background

Probable catalytic subunit of a GTPase activating protein that has specificity for Rab3 subfamily (RAB3A, RAB3B, RAB3C and RAB3D). Rab3 proteins are involved in regulated exocytosis of neurotransmitters and hormones. Specifically converts active Rab3-GTP to the inactive form Rab3-GDP. Required for normal eye and brain development. May participate in neurodevelopmental processes such as proliferation, migration and differentiation before synapse formation, and non-synaptic vesicular release of neurotransmitters.

References

- Nomura N.,et al.DNA Res. 1:223-229(1994).
Bechtel S.,et al.BMC Genomics 8:399-399(2007).
Fukui K.,et al.J. Biol. Chem. 272:4655-4658(1997).
Oishi H.,et al.J. Biol. Chem. 273:34580-34585(1998).
Clabecq A.,et al.J. Biol. Chem. 275:31786-31791(2000).

Images



All lanes : Anti-RAB3GAP1 Antibody at 1:1000 dilution
Lane 1: HeLa whole cell lysates Lane 2: Jurkat whole cell lysates
Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution
Predicted band size : 111 kDa
Blocking/Dilution buffer: 5% NFDm/TBST.

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