

RAB3GAP1 Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP51827

Product Information

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

Additional Information

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| 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 derived from human RAB3GAP1 |
| 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

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|----------|---|
| Name | RAB3GAP1 (HGNC:17063) |
| 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: 10859313 , PubMed: 24891604 , PubMed: 9030515). 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). 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 proliferation, migration and differentiation before synapse formation, and 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..

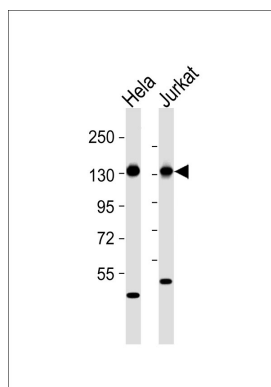
Background

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.

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