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Rab 3 GAP p130 Polyclonal Antibody

Catalog # AP72109

Product Information

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

Additional Information

Gene ID	22930
Other Names	RAB3GAP1; KIAA0066; RAB3GAP; Rab3 GTPase-activating protein catalytic subunit; RAB3 GTPase-activating protein 130 kDa subunit; Rab3-GAP p130; Rab3-GAP
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications. IHC-P~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

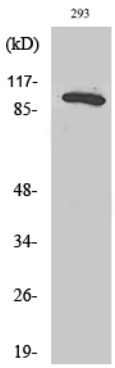
Name	RAB3GAP1 (HGNC:17063)
Synonyms	KIAA0066, RAB3GAP
Function	Catalytic subunit of the Rab3 GTPase-activating (Rab3GAP) complex composed of RAB3GAP1 and RAB3GAP2, which has GTPase-activating protein (GAP) activity towards various Rab3 subfamily members (RAB3A, RAB3B, RAB3C and RAB3D), RAB5A and RAB43, 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.

Images



Western Blot analysis of various cells using Rab 3 GAP p130 Polyclonal Antibody diluted at 1：2000