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Rab 3 GAP p150 Polyclonal Antibody

Catalog # AP72110

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	Q9H2M9
Reactivity	Human, Mouse, Rat, Monkey
Host	Rabbit
Clonality	Polyclonal
Calculated MW	155985

Additional Information

Gene ID	25782
Other Names	RAB3GAP2; KIAA0839; Rab3 GTPase-activating protein non-catalytic subunit; RGAP-iso; Rab3 GTPase-activating protein 150 kDa subunit; Rab3-GAP p150; Rab3-GAP150; Rab3-GAP regulatory subunit
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 IF~~1:50~200 ICC~~N/A E~~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	RAB3GAP2 (HGNC:17168)
Synonyms	KIAA0839
Function	Regulatory 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:9733780, PubMed:39779760). The complex has GTPase-activating protein (GAP) activity towards various Rab3 subfamily members (RAB3A, RAB3B, RAB3C and RAB3D), RAB5A and RAB43, and has guanine nucleotide exchange factor (GEF) activity towards RAB18 (PubMed:9733780, PubMed:39779760, PubMed:24891604). The Rab3GAP complex acts as a GEF for RAB18 by promoting GDP release from RAB18 and the conversion of inactive RAB18-GDP to the active form RAB18-GTP (PubMed:39779760, PubMed:24891604). Recruits and stabilizes RAB18 at the cis-Golgi membrane in human 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 (By similarity). May participate in neurodevelopmental processes such as cell proliferation, migration and differentiation before synapse formation, and non-synaptic vesicular release of neurotransmitters (By similarity).

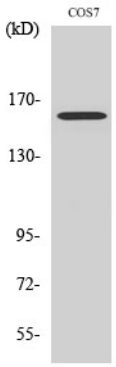
Cellular Location Cytoplasm {ECO:0000250|UniProtKB:Q5U1Z0}. Endoplasmic reticulum. Note=In neurons, it is enriched in the synaptic soluble fraction {ECO:0000250|UniProtKB:Q5U1Z0}

Tissue Location Ubiquitous..

Background

Regulatory 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. Rab3 GTPase-activating complex 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 p150 Polyclonal Antibody