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Anti-RAB3GAP2 Antibody

Rabbit polyclonal antibody to RAB3GAP2
Catalog # AP60986

Product Information

Application	WB, IHC
Primary Accession	Q9H2M9
Other Accession	Q8BMG7
Reactivity	Human, Mouse, Rat, Monkey
Host	Rabbit
Clonality	Polyclonal
Calculated MW	155985

Additional Information

Gene ID	25782
Other Names	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
Target/Specificity	Recognizes endogenous levels of RAB3GAP2 protein.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/50 - 1/100) IHC~~WB (1/500 - 1/1000), IHC (1/50 - 1/100)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	RAB3GAP2 (HGNC:17168)
Synonyms	KIAA0839
Function	Regulatory 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:24891604, PubMed:9733780). As part of the Rab3GAP complex, acts as a GAP for Rab3 proteins by converting active RAB3-GTP to the inactive form RAB3-GDP (By similarity). Rab3 proteins are involved in regulated exocytosis of neurotransmitters and hormones (By similarity). 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 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 proliferation, migration and differentiation before synapse formation, and non-synaptic vesicular release of neurotransmitters (By similarity).

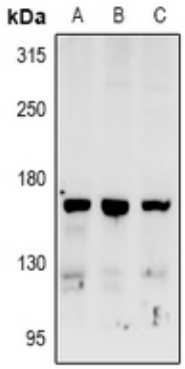
Cellular Location Cytoplasm {ECO:0000250|UniProtKB:Q5U1Z0}. Endoplasmic reticulum. Note=In neurons, it is enriched in the synaptic soluble fraction {ECO:0000250|UniProtKB:Q5U1Z0}

Tissue Location Ubiquitous..

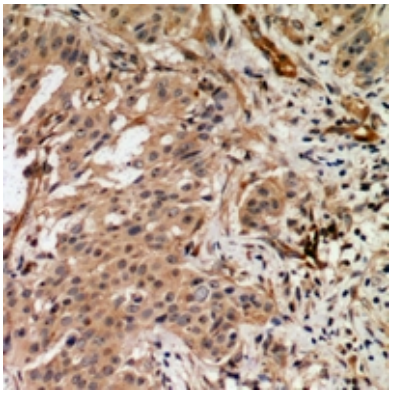
Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human RAB3GAP2. The exact sequence is proprietary.

Images



Western blot analysis of RAB3GAP2 expression in MCF7 (A), SGC7901 (B), A549 (C) whole cell lysates.



Immunohistochemical analysis of RAB3GAP2 staining in human breast cancer 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.