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ARF6 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50749

Product Information

Application	WB
Primary Accession	P62330
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	polyclonal
Calculated MW	20082

Additional Information

Gene ID	382
Other Names	ADP-ribosylation factor 6, ARF6
Dilution	WB~~1:1000
Format	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.
Storage Conditions	-20℃

Protein Information

Name	ARF6 {ECO:0000303|Ref.6, ECO:0000312|HGNC:HGNC:659}
Function	GTP-binding protein involved in protein trafficking that regulates endocytic recycling and cytoskeleton remodeling (PubMed:11266366, PubMed:16737952, PubMed:18400762, PubMed:21170023, PubMed:32103017, PubMed:7589240). GTP-bound form plays an important role in the transport of multiple palmitoylated proteins form the Golgi to the plasma membrane (PubMed:37461827). Required for normal completion of mitotic cytokinesis (By similarity). Plays a role in the reorganization of the actin cytoskeleton and the formation of stress fibers (By similarity). Involved in the regulation of dendritic spine development, contributing to the regulation of dendritic branching and filopodia extension (PubMed:14978216). Potentiates the neurite outgrowth in primary neurons by interacting with the molecular adapter APBB1 (PubMed:36250347). Plays an important role in membrane trafficking, during junctional remodeling and epithelial polarization (PubMed:36017701). Regulates surface levels of adherens junction proteins such as CDH1 (By similarity). Required for NTRK1 sorting to the recycling pathway from early endosomes (By similarity).
Cellular Location	Cytoplasm, cytosol. Cell membrane; Lipid-anchor. Endosome membrane;

Lipid-anchor. Recycling endosome membrane; Lipid-anchor. Cell projection, filopodium membrane; Lipid- anchor. Cell projection, ruffle. Cleavage furrow. Midbody, Midbody ring. Early endosome membrane {ECO:0000250|UniProtKB:P62331}; Lipid-anchor {ECO:0000250|UniProtKB:P62331}. Golgi apparatus, trans-Golgi network membrane {ECO:0000250|UniProtKB:P62331}; Lipid-anchor {ECO:0000250|UniProtKB:P62331}. Note=Distributed uniformly on the plasma membrane, as well as throughout the cytoplasm during metaphase Subsequently concentrated at patches in the equatorial region at the onset of cytokinesis, and becomes distributed in the equatorial region concurrent with cleavage furrow ingression. In late stages of cytokinesis, concentrates at the midbody ring/Flemming body (PubMed:23603394). Recruitment to the midbody ring requires both activation by PSD/EFA6A and interaction with KIF23/MKLP1 (PubMed:23603394). After abscission of the intercellular bridge, incorporated into one of the daughter cells as a midbody remnant and localizes to punctate structures beneath the plasma membrane (PubMed:23603394). Recruited to the cell membrane in association with CYTH2 and ARL4C (PubMed:17398095). Colocalizes with DAB2IP at the plasma membrane and endocytic vesicles (PubMed:19948740) Myristoylation is required for proper localization to membranes: myristoylation on Lys-3 allows ARF6 to remain on membranes during the GTPase cycle (PubMed:32103017, PubMed:7589240)

Tissue Location Ubiquitous, with higher levels in heart, substantia nigra, and kidney.

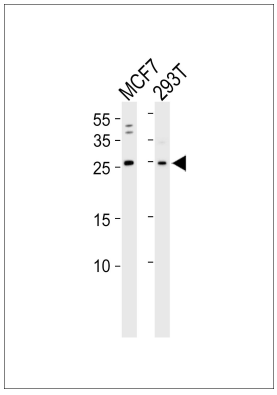
Background

GTP-binding protein involved in protein trafficking that regulates endocytic recycling and cytoskeleton remodeling. Required for normal completion of mitotic cytokinesis. Plays a role in the reorganization of the actin cytoskeleton and the formation of stress fibers. May also modulate vesicle budding and uncoating within the Golgi apparatus. Involved in the regulation of dendritic spine development, contributing to the regulation of dendritic branching and filopodia extension. Functions as an allosteric activator of the cholera toxin catalytic subunit, an ADP-ribosyltransferase.

References

Tsuchiya M.,et al.J. Biol. Chem. 266:2772-2777(1991).
Lebeda R.A.,et al.DNA Cell Biol. 22:737-741(2003).
Mao M.,et al.Proc. Natl. Acad. Sci. U.S.A. 95:8175-8180(1998).
Puhl H.L. III,et al.Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).

Images



Western blot analysis of lysates from MCF7,293T cell line (from left to right),using ARF6 Antibody(AP50749). AP50749 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysates at 35ug per lane.

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