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ARF6 Antibody

Rabbit mAb
Catalog # AP91104

Product Information

Application	WB, IF, ICC
Primary Accession	P62330
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	ADP ribosylation factor 6; ARF6; Small GTP binding protein;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	20082

Additional Information

Dilution	WB 1:500~1:2000 ICC/IF 1:50~1:200
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human ARF6
Description	ADP-ribosylation factor (Arf) proteins are low molecular weight GTP binding proteins that belong to the Ras GTPase superfamily. May modulate vesicle budding and uncoating within the Golgi apparatus. Functions as an allosteric activator of the cholera toxin catalytic subunit, an ADP-ribosyltransferase. Involved in the regulation of dendritic spine development (By similarity).
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

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).

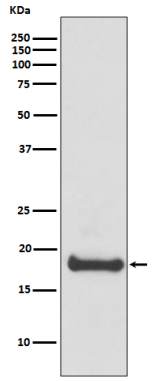
Cellular Location

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.

Images



Western blot analysis of ARF6 expression in 293T cell lysate.