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Anti-ARF6 Picoband Antibody

Catalog # ABO12672

Product Information

Application	WB
Primary Accession	P62330
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for ADP-ribosylation factor 6(ARF6) detection. Tested with WB in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	382
Other Names	ADP-ribosylation factor 6, ARF6
Calculated MW	20082
Application Details	Western blot, 0.1-0.5 □g/ml, Human, Mouse, Rat
Subcellular Localization	Golgi apparatus. Cell membrane; Lipid- anchor. Endosome membrane; Lipid-anchor. Recycling endosome membrane ; Lipid-anchor . Cell projection, filopodium membrane; Lipid-anchor. Midbody . Cytoplasm . Cleavage furrow . Distributed throughout the cytoplasm during metaphase. Transiently detected at the ingressing cleavage furrow during mitotic cytokinesis. Recruited to the midbody at later stages of cytokinesis; this requires interaction with KIF23 (By similarity). Recruited to the cell membrane in association with CYTH2 and ARL4C. Colocalizes with DAB2IP at the plasma membrane and endocytic vesicles. .
Tissue Specificity	Ubiquitous, with higher levels in heart, substantia nigra, and kidney. .
Source	Eukaryota
Protein Name	ADP-ribosylation factor 6
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E.coli-derived human ARF6 recombinant protein (Position: G2-S175). Human ARF6 shares 100% amino acid (aa) sequence identity with both mouse and rat ARF6.

Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

Protein Information

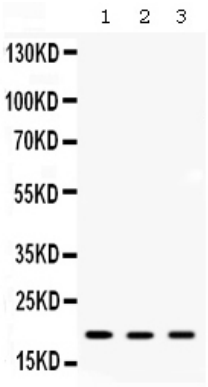
Name	ARF6 {ECO:0000303|Ref.6, ECO:0000312|HGNC:HGNC:659}
Function	GTP-binding protein involved in protein trafficking that regulates endocytic recycling and cytoskeleton remodeling (PubMed:11266366, PubMed:16737952, PubMed:18400762, PubMed:21170023, PubMed:32103017, PubMed:7589240). GTP-bound form plays 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

ADP-ribosylation factor 6 (ARF6) is a member of the human ARF gene family, which is part of the RAS

superfamily. The ARF genes encode small guanine nucleotide-binding proteins that stimulate the ADP-ribosyltransferase activity of cholera toxin and play a role in vesicular trafficking and as activators of phospholipase D. The product of this gene is localized to the plasma membrane, and regulates vesicular trafficking, remodelling of membrane lipids, and signaling pathways that lead to actin remodeling. A pseudogene of this gene is located on chromosome 7.

Images



Western blot analysis of ARF6 expression in rat kidney extract (lane 1), mouse kidney extract (lane 2) and MCF-7 whole cell lysates (lane 3). ARF6 at 20KD was detected using rabbit anti- ARF6 Antigen Affinity purified polyclonal antibody (Catalog # ABO12672) at 0.5 ??g/mL. The blot was developed using chemiluminescence (ECL) method .

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