

Anti-ARF6 Picoband Antibody

Catalog # ABO12672

Specification

Anti-ARF6 Picoband Antibody - Product Information

ApplicationWBPrimary AccessionP62330HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for ADP-ribosylation factor 6(ARF6) detection. Tested with WB inHuman;Mouse;Rat.Human;Mouse;Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-ARF6 Picoband Antibody - Additional Information

Gene ID 382

Other Names ADP-ribosylation factor 6, ARF6

Calculated MW 20082 MW KDa

Application Details Western blot, 0.1-0.5 μg/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. .

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.

Anti-ARF6 Picoband Antibody - 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:1266366, PubMed:16737952, PubMed:16737952, PubMed:18400762, PubMed:21170023, PubMed:32103017, PubMed:32103017, PubMed:37461827). 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:<a href="http://www.uniprot.org/citations/14978216"

target="_blank">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.

Anti-ARF6 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-ARF6 Picoband Antibody - 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 .

Anti-ARF6 Picoband Antibody - 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.