

KD-Validated Anti-ADP ribosylation factor 6 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI1190

Specification

KD-Validated Anti-ADP ribosylation factor 6 Rabbit Monoclonal Antibody - Product Information

Application WB, FC, ICC Primary Accession P62330

Reactivity Rat, Human, Mouse

Clonality Monoclonal Isotype Rabbit IgG

Calculated MW Predicted, 20 kDa, observed, 18 kDa KDa

Gene Name ARI

Aliases ARF6; ADP Ribosylation Factor 6;

ADP-Ribosylation Factor 6; EC 3.6.5.2

Immunogen A synthesized peptide derived from human

ARF6

KD-Validated Anti-ADP ribosylation factor 6 Rabbit Monoclonal Antibody - Additional Information

Gene ID 382

Other Names

ADP-ribosylation factor 6 {ECO:0000303|Ref.6}, 3.6.5.2, ARF6 {ECO:0000303|Ref.6,

ECO:0000312|HGNC:HGNC:659}

KD-Validated Anti-ADP ribosylation factor 6 Rabbit Monoclonal 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: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.

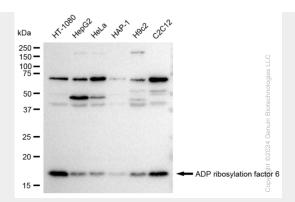
KD-Validated Anti-ADP ribosylation factor 6 Rabbit Monoclonal Antibody - Protocols

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

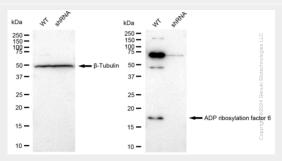
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-ADP ribosylation factor 6 Rabbit Monoclonal Antibod	y -	Images
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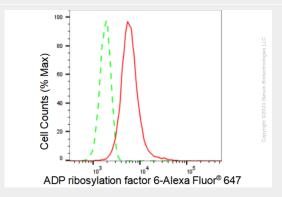




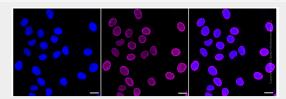
Western blotting analysis using anti-ADP ribosylation factor 6 antibody (Cat#AGI1190). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-ADP ribosylation factor 6 antibody (Cat#AGI1190, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



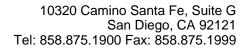
Western blotting analysis using anti-ADP ribosylation factor 6 antibody (Cat#AGI1190). ADP ribosylation factor 6 expression in wild type (WT) and ADP ribosylation factor 6 shRNA knockdown (KD) HeLa cells with 30 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with anti-ADP ribosylation factor 6 antibody (Cat#AGI1190, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of ADP ribosylation factor 6 expression in HT-1080 cells using ADP ribosylation factor 6 antibody (Cat#AGI1190, 1:2,000). Green, isotype control; red, ADP ribosylation factor 6.



Immunocytochemical staining of HT-1080 cells with ADP ribosylation factor 6 antibody (Cat#AGI1190, 1:1,000). Nuclei were stained blue with DAPI; ADP ribosylation factor 6 was stained





magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: $20~\mu m$.