10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KD-Validated Anti-ADP ribosylation factor 1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1181

Specification

KD-Validated Anti-ADP ribosylation factor 1 Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	P84077
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 21 kDa, observed, 18 kDa KDa**
Gene Name	**ARF1**
Aliases	**ARF1; ADP Ribosylation Factor 1; ADP-Ribosylation Factor 1; EC 3.6.5.2; PVNH8**
Immunogen	**A synthesized peptide derived from human ARF1**

KD-Validated Anti-ADP ribosylation factor 1 Rabbit Monoclonal Antibody - Additional Information

Gene ID	**375**

Other Names
ADP-ribosylation factor 1, 3.6.5.2, ARF1

KD-Validated Anti-ADP ribosylation factor 1 Rabbit Monoclonal Antibody - Protein Information

Name ARF1

Function
Small GTPase involved in protein trafficking between different compartments (PubMed:8253837). Modulates vesicle budding and uncoating within the Golgi complex (PubMed:8253837). In its GTP-bound form, triggers the recruitment of coatomer proteins to the Golgi membrane (PubMed:8253837). The hydrolysis of ARF1-bound GTP, which is mediated by ARFGAPs proteins, is required for dissociation of coat proteins from Golgi membranes and vesicles (PubMed:8253837). The GTP- bound form interacts with PICK1 to limit PICK1-mediated inhibition of Arp2/3 complex activity; the function is linked to AMPA receptor (AMPAR) trafficking, regulation of synaptic plasticity of excitatory synapses and spine shrinkage during long-term depression (LTD) (By similarity). Plays a key role in the regulation of intestinal stem cells and gut microbiota, and is essential for maintaining intestinal homeostasis (By similarity). Also plays a critical role in mast cell expansion but not in mast cell maturation by facilitating optimal mTORC1 activation (By similarity).

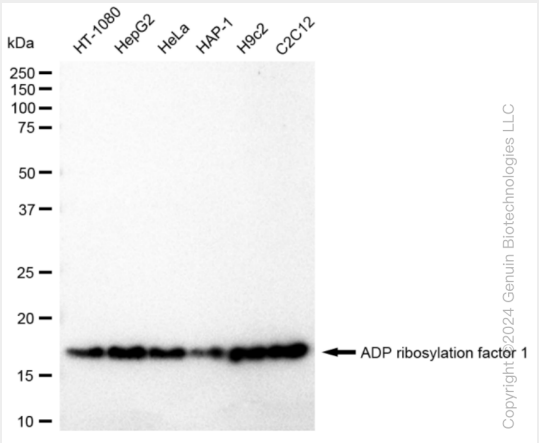
Cellular Location
Golgi apparatus membrane; Lipid-anchor; Cytoplasmic side. Synapse, synaptosome {ECO:0000250|UniProtKB:P84079}. Postsynaptic density {ECO:0000250|UniProtKB:P84079}. Note=In the GDP-bound form, associates transiently with the membranes via its myristoylated N-terminus where guanine nucleotide-exchange factor (GEF)-mediated nucleotide exchange occurs (By similarity). Following nucleotide exchange, the GTP-bound form undergoes a conformational change, leading to the exposure of a myristoylated N-terminal amphipathic helix that provides stable membrane anchorage (By similarity). {ECO:0000250|UniProtKB:P84080}

KD-Validated Anti-ADP ribosylation factor 1 Rabbit Monoclonal Antibody - Protocols

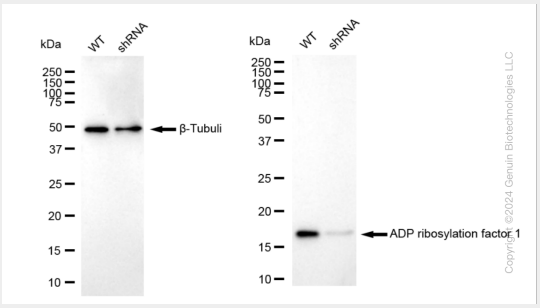
Provided below are standard protocols that you may find useful for product applications.

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

KD-Validated Anti-ADP ribosylation factor 1 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-ADP ribosylation factor 1 antibody (Cat#AGI1181). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-ADP ribosylation factor 1 antibody (Cat#AGI1181, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-ADP ribosylation factor 1 antibody (Cat#AGI1181). ADP

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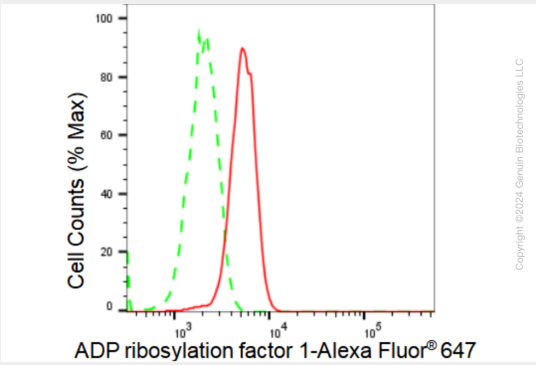
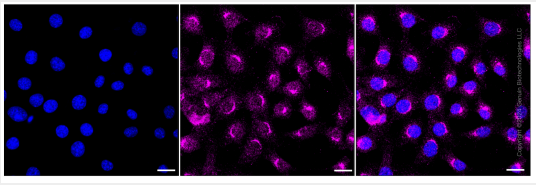
ribosylation factor 1 expression in wild type (WT) and ADP ribosylation factor 1 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-ADP ribosylation factor 1 antibody (Cat#AGI1181, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of ADP ribosylation factor 1 expression in C2C12 cells using ADP ribosylation factor 1 antibody (Cat#AGI1181, 1:2000). Green, isotype control; red, ADP ribosylation factor 1.



Immunocytochemical staining of C2C12 cells with ADP ribosylation factor 1 antibody (Cat#AGI1181, 1:1,000). Nuclei were stained blue with DAPI; ADP ribosylation factor 1 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 µm.