

**Goat Anti-ARF1, 2, 3, 4 Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1094a****Specification**

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**Goat Anti-ARF1, 2, 3, 4 Antibody - Product Information**

Application	WB, FC, Pep-ELISA
Primary Accession	<a href="#">P84077</a>
Other Accession	<a href="#">NP_001019399</a> , <a href="#">375</a> , <a href="#">376</a> , <a href="#">377</a> , <a href="#">378</a> , <a href="#">11840</a> (mouse), <a href="#">64310</a> (rat)
Reactivity	Human
Predicted	Mouse, Rat, Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	20697

**Goat Anti-ARF1, 2, 3, 4 Antibody - Additional Information****Gene ID** 375**Other Names**

ADP-ribosylation factor 1, ARF1

**Dilution**WB~~1:1000  
FC~~1:10~50  
Pep-ELISA~~N/A**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-ARF1, 2, 3, 4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-ARF1, 2, 3, 4 Antibody - Protein Information****Name** ARF1**Function**

Small GTPase involved in protein trafficking between different compartments (PubMed:<a href="http://www.uniprot.org/citations/8253837" target="\_blank">8253837</a>). Modulates vesicle budding and uncoating within the Golgi complex (PubMed:<a href="http://www.uniprot.org/citations/8253837" target="\_blank">8253837</a>). In its GTP-bound form, triggers the recruitment of coatamer proteins to the Golgi membrane (PubMed:<a href="http://www.uniprot.org/citations/8253837" target="\_blank">8253837</a>). 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:<a href="http://www.uniprot.org/citations/8253837" target="\_blank">8253837</a>). The GTP- bound form interacts with PICK1 to limit PICK1-mediated inhibition of Arp2/3 complex activity; the function is linked to AMPA receptor (AMPA) 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

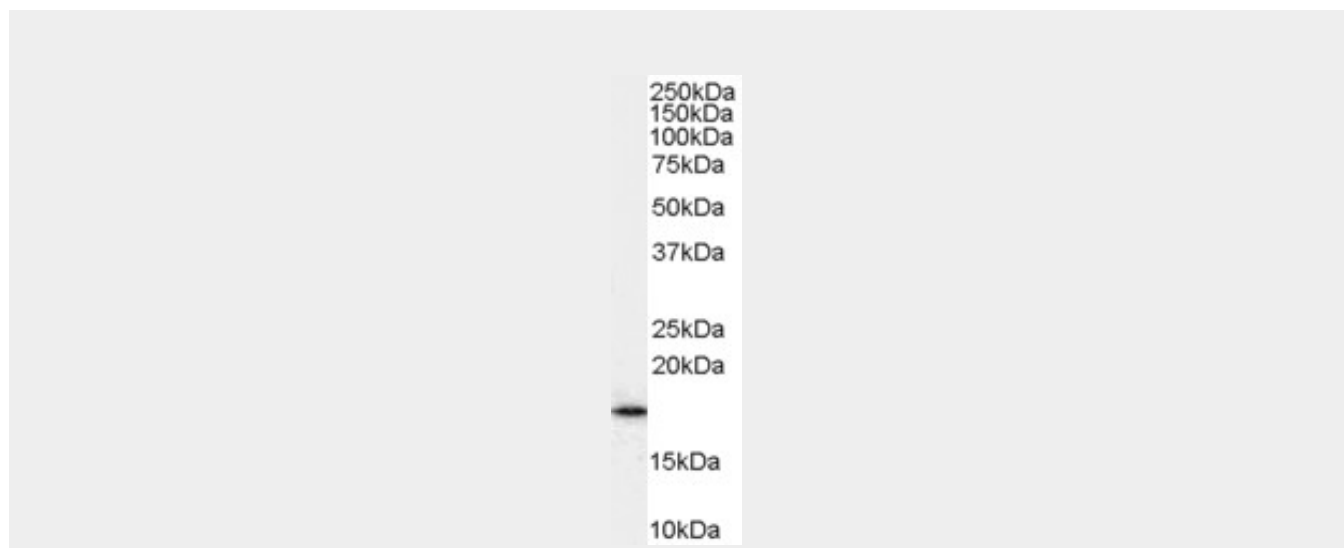
Golgi apparatus membrane; Lipid-anchor; Cytoplasmic side. Synapse, synaptosome {ECO:0000250|UniProtKB:P84079}. Postsynaptic density {ECO:0000250|UniProtKB:P84079}. Note=In the GDP-bound form, associates transiently with the membranes via its myristoylated N-terminus where guanine nucleotide-exchange 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}

### Goat Anti-ARF1, 2, 3, 4 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 Cytometry](#)
- [Cell Culture](#)

### Goat Anti-ARF1, 2, 3, 4 Antibody - Images



AF1094a (1 µg/ml) staining of HepG2 cell lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

#### **Goat Anti-ARF1, 2, 3, 4 Antibody - Background**

ADP-ribosylation factor 1 (ARF1) is a member of the human ARF gene family. The family members encode small guanine nucleotide-binding proteins that stimulate the ADP-ribosyltransferase activity of cholera toxin and play a role in vesicular trafficking as activators of phospholipase D. The gene products, including 6 ARF proteins and 11 ARF-like proteins, constitute a family of the RAS superfamily. The ARF proteins are categorized as class I (ARF1, ARF2 and ARF3), class II (ARF4 and ARF5) and class III (ARF6), and members of each class share a common gene organization. The ARF1 protein is localized to the Golgi apparatus and has a central role in intra-Golgi transport. Multiple alternatively spliced transcript variants encoding the same protein have been found for this gene.

#### **Goat Anti-ARF1, 2, 3, 4 Antibody - References**

Regulation of mTORC1 by the Rab and Arf GTPases. Li L, et al. J Biol Chem, 2010 Jun 25. PMID 20457610.

Protein complexes containing CYFIP/Sra/PIR121 coordinate Arf1 and Rac1 signalling during clathrin-AP-1-coated carrier biogenesis at the TGN. Anitei M, et al. Nat Cell Biol, 2010 Apr. PMID 20228810.

Modifications to the C-terminus of Arf1 alter cell functions and protein interactions. Jian X, et al. Traffic, 2010 Jun. PMID 20214751.

Role of the GTPase Rab1b in ebolavirus particle formation. Yamayoshi S, et al. J Virol, 2010 May. PMID 20164217.

Role of the second cysteine-rich domain and Pro275 in protein kinase D2 interaction with ADP-ribosylation factor 1, trans-Golgi network recruitment, and protein transport. Pusapati GV, et al. Mol Biol Cell, 2010 Mar. PMID 20089835.