

ADP - Ribosylation Factor 1, ARF1 (2 - 17)

Synthetic Peptide Catalog # SP2252b

Specification

ADP - Ribosylation Factor 1, ARF1 (2 - 17) - Product Information

Primary Accession Other Accession Sequence

P84079 Q4R5P2, P84077, P84078, P84080 NH2-GNIFANLFKGLFGKKE-COOH

ADP - Ribosylation Factor 1, ARF1 (2 - 17) - Additional Information

Gene ID 64310

Other Names

ADP-ribosylation factor 1, Arf1

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ADP - Ribosylation Factor 1, ARF1 (2 - 17) - Protein Information

Name Arf1

Function

Small GTPase involved in protein trafficking between different compartments (By similarity). Modulates vesicle budding and uncoating within the Golgi complex (By similarity). In its GTP-bound form, triggers the recruitment of coatomer proteins to the Golgi membrane (By similarity). The hydrolysis of ARF1-bound GTP, which is mediated by ARFGAPs proteins, is required for dissociation of coat proteins from Golgi membranes and vesicles (By similarity). 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) (PubMed:23889934). Plays a key role in the regulation of intestinal stem cells and gut microbiota, and is essential for maintaining intestinal homeostasis (By similarity). Plays also 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 {ECO:0000250|UniProtKB:P84080}; Cytoplasmic side Synapse, synaptosome. Postsynaptic density. 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}

ADP - Ribosylation Factor 1, ARF1 (2 - 17) - Images