

ARG57110
anti-ARF1 antibody [1B3]Package: 50 µl
Store at: -20°C**Summary**

Product Description	Mouse Monoclonal antibody [1B3] recognizes ARF1
Tested Reactivity	Hu
Tested Application	FACS, ICC/IF, WB
Host	Mouse
Clonality	Monoclonal
Clone	1B3
Isotype	IgG1, kappa
Target Name	ARF1
Species	Human
Immunogen	Recombinant fragment around aa. 1-181 of Human ARF1
Conjugation	Un-conjugated
Alternate Names	ADP-ribosylation factor 1

Application Instructions

Application table	Application	Dilution
	FACS	Assay-dependent
	ICC/IF	Assay-dependent
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

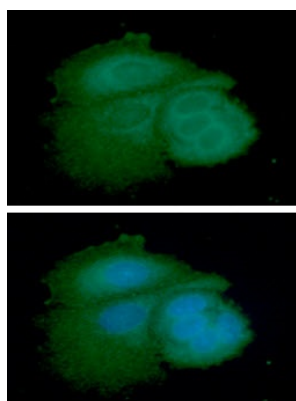
Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS (pH 7.4), 0.02% Sodium azide and 10% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	10% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 375 Human Swiss-port # P84077 Human
Gene Symbol	ARF1
Gene Full Name	ADP-ribosylation factor 1
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. [provided by RefSeq, Jul 2008]
Function	GTP-binding protein that functions as an allosteric activator of the cholera toxin catalytic subunit, an ADP-ribosyltransferase. Involved in protein trafficking among different compartments. Modulates vesicle budding and uncoating within the Golgi complex. Deactivation induces the redistribution of the entire Golgi complex to the endoplasmic reticulum, suggesting a crucial role in protein trafficking. In its GTP-bound form, it triggers the association with coat proteins with the Golgi membrane. The hydrolysis of ARF1-bound GTP, which is mediated by ARFGAPs proteins, is required for dissociation of coat proteins from Golgi membranes and vesicles. 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). [UniProt]
Calculated Mw	21 kDa
PTM	Demyristoylated by S.flexneri cysteine protease IpaJ which cleaves the peptide bond between N-myristoylated Gly-2 and Asn-3.

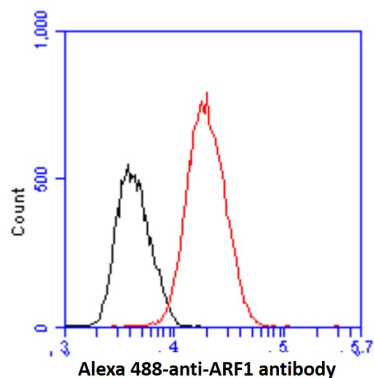
Images



ARG57110 anti-ARF1 antibody [1B3] ICC/IF image

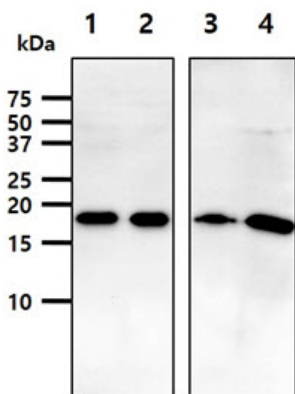
Immunofluorescence: MCF7 cell line stained with ARG57110 anti-ARF1 antibody [1B3] at 1:100 (Green).

DAPI (Blue) for nucleus staining.



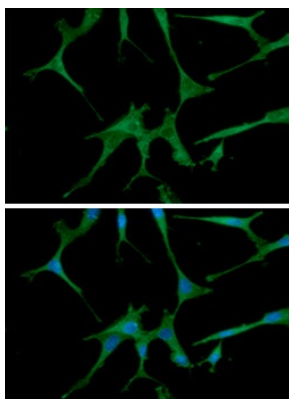
ARG57110 anti-ARF1 antibody [1B3] FACS image

Flow Cytometry: MCF7 cell line stained with ARG57110 anti-ARF1 antibody [1B3] at 2-5 μg for 1×10^6 cells (red line). Secondary antibody: Goat anti-Mouse IgG Alexa fluor 488 conjugate. Isotype control antibody: Mouse IgG (black line).



ARG57110 anti-ARF1 antibody [1B3] WB image

Western blot: 40 μg of 1) HeLa, 2) HepG2, 3) Brain tissue lysate, and 4) MCF cell lysates stained with ARG57110 anti-ARF1 antibody [1B3] at 1:1000.



ARG57110 anti-ARF1 antibody [1B3] ICC/IF image

Immunofluorescence: U87MG cell line stained with ARG57110 anti-ARF1 antibody [1B3] at 1:100 (Green).

DAPI (Blue) for nucleus staining.