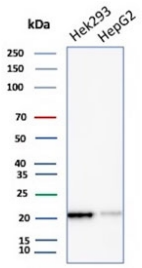
ARF1 Antibody 1A9/5 / ADP-Ribosylation Factor 1 Monoclonal Antibody [clone 1A9/5] (V3811)

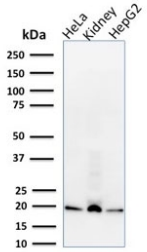
Catalog No.	Formulation	Size
V3811-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3811-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3811SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

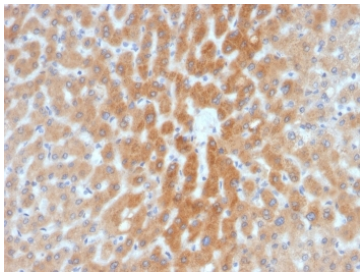
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	1A9/5
Purity	Protein G affinity chromatography
UniProt	P84077
Localization	Cytoplasmic (Golgi)
Applications	Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This ARF1 Antibody 1A9/5 / ADP-Ribosylation Factor 1 Monoclonal Antibody is available for research use only.



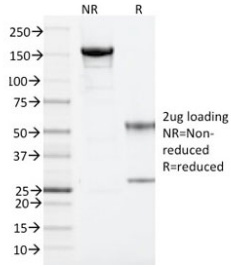
ARF1 Antibody 1A9/5 in HEK293 and HepG2 Cells WB. Western blot testing of human HEK293 (lane 1) and HepG2 (lane 2) cell lysates with ARF1 Antibody clone 1A9/5. A discrete band is detected at approximately 21 kDa in both samples, consistent with the predicted molecular weight of ARF1, with substantially stronger signal in HEK293 cells. The clean target-sized bands demonstrate detection of endogenous ARF1 and support western blot performance of the ADP-Ribosylation Factor 1 Monoclonal Antibody.



ARF1 Antibody 1A9/5 in HeLa, Kidney and HepG2 Samples WB. Western blot testing of human HeLa cell lysate (lane 1), kidney tissue lysate (lane 2) and HepG2 cell lysate (lane 3) with ARF1 Antibody clone 1A9/5. A prominent band is detected near the predicted molecular weight of approximately 21 kDa in all three samples, with differences in signal intensity among the lysates. The consistent target-sized signal across cell and tissue samples reinforces western blot detection with the ADP-Ribosylation Factor 1 Monoclonal Antibody.



ARF1 Antibody 1A9/5 in Human Liver IHC. Immunohistochemistry staining of FFPE human liver tissue with ARF1 Antibody clone 1A9/5. HIER was performed by boiling tissue sections in pH 6 10mM citrate buffer for 10-20 min followed by cooling at RT for 20 min. The image shows widespread granular brown cytoplasmic staining in hepatocytes, with nuclei remaining comparatively unstained. This cytoplasmic distribution is consistent with the intracellular localization of ARF1 and supports tissue detection with the ADP-Ribosylation Factor 1 Monoclonal Antibody.



Purified ARF1 Antibody 1A9/5 SDS-PAGE. SDS-PAGE analysis of 2 ug purified, BSA-free ARF1 Antibody clone 1A9/5 under non-reducing (NR) and reducing (R) conditions. The non-reduced preparation shows a predominant intact immunoglobulin band near 150 kDa, while the reduced preparation resolves the expected antibody heavy and light chains near approximately 50 kDa and 25 kDa. The electrophoretic profile supports the integrity and purity of the ADP-Ribosylation Factor 1 Monoclonal Antibody preparation.

Description

ARF1 Antibody 1A9/5 / ADP-Ribosylation Factor 1 Monoclonal Antibody recognizes ARF1, a small guanine nucleotide-binding protein belonging to the ADP-ribosylation factor family of Ras-related GTPases. ARF1 functions as a molecular switch that cycles between inactive GDP-bound and active GTP-bound states. Through this regulated cycle, ARF1 participates in membrane trafficking, vesicle formation and maintenance of organelle structure, with particularly important functions at the Golgi apparatus and within the secretory pathway.

ARF1 activity is regulated by guanine nucleotide exchange factors that promote GTP loading and GTPase-activating proteins that accelerate GTP hydrolysis. In its active GTP-bound state, membrane-associated ARF1 recruits coat proteins and other effectors involved in membrane remodeling and cargo transport. ARF1 is particularly well known for recruiting COPI coat components to Golgi membranes, supporting retrograde transport within the Golgi and from the Golgi to the endoplasmic reticulum.

ADP-Ribosylation Factor 1 also participates in regulation of membrane lipid composition, cargo sorting and organelle dynamics. ARF1-dependent recruitment or activation of lipid-modifying enzymes helps generate membrane environments required for trafficking events. Through these functions, ARF1 connects vesicular transport with Golgi organization, membrane remodeling and communication between intracellular compartments.

ARF1 activity can also intersect with signaling pathways involved in proliferation, metabolism and cytoskeletal regulation. Dysregulation of ARF1-dependent processes has therefore attracted interest in cancer and other disease models in which membrane trafficking and signaling are altered. Because receptors and other signaling proteins depend on intracellular transport for proper localization, changes in ARF1 activity can have consequences extending beyond the trafficking machinery itself.

Clone 1A9/5 has been used in multiple published studies investigating ARF1, providing an established literature history for this monoclonal antibody. This same-clone research history provides an additional reference point for investigators

studying ARF1 expression and cell biology. NSJ Bioreagents offers clone 1A9/5 for research into ARF1 biology, membrane trafficking and Golgi-associated processes.

An ARF1 Antibody provides a monoclonal reagent for investigating this small GTPase and intracellular membrane trafficking, while an ADP-Ribosylation Factor 1 Monoclonal Antibody provides the expanded protein-name terminology used in research on vesicular transport and Golgi organization.

Explore related antibodies involved in intracellular signaling and regulatory pathways on our Signal Transduction Antibodies page.

Application Notes

Titering of the ARF1 Antibody 1A9/5 / ADP-Ribosylation Factor 1 Monoclonal Antibody may be required for optimal performance.

Immunogen

The C-terminal amino acid sequence SNQLRNQ from the human protein was used as the immunogen for the ARF1 Antibody 1A9/5.

Storage

Store the ARF1 Antibody 1A9/5 at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

ADP-Ribosylation Factor 1 antibody, ADP Ribosylation Factor 1 antibody

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