

Monoclonal anti-human ARF1 antibody (clone AT1B3)

Mouse IgG₁, κ

Cat. No. IBATGA0207

Immunogen: Recombinant human ARF1 (1-181aa) purified from E. coli

NCBI Accession No.: NP_001649

Isotype: Mouse IgG₁ heavy chain and κ light chain

Clone: Anti-human ARF1 mAb, clone 1B3, is derived from hybridization of mouse F0 myeloma cells with spleen cells from BALB/c mice immunized with a recombinant human ARF1 protein.

Description: ADP-ribosylation factor 1 (ARF1) is a member of the human ARF gene family. The family member is essential and ubiquitous in eukaryotes, being involved in vesicular transport and functioning as an activator of phospholipase D and cholera toxin. The functions of ARF proteins in membrane traffic and organelle integrity are intimately tied to its reversible association with membranes and specific interactions with membrane phospholipids. ARF1 is various membrane trafficking events in the ER-Golgi system and in the maintenance of organelle structure. Inactive ARF1 (ARF1-GDP) localizes in the cytoplasm, while the active form (ARF1-GTP) localizes in the membrane.

Concentration: 1 mg/ml

Form: Liquid. In Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% Glycerol

Storage: Can be stored at +4C. For long term storage, aliquot and store at -20C. Avoid repeated freezing and thawing cycles.

Usage: The antibody has been tested by ELISA, Western blot analysis, Flow cytometry and ICC/IF to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

Application: ELISA, WB, Flow cytometry, ICC/IF

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.





Western blot analysis

The lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human ARF1 antibody (1:1000). Proteins were visualized using a goat antimouse secondary antibody conjugated to HRP and an ECL detection system.

Lane 1.: HeLa cell lysate Lane 2.: HepG2 cell lysate Lane 3.: Brain tissue lysate Lane 4.: MCF cell lysate



Flow cytometry

ICC/IF analysis

488 conjugate (Green).

Flow cytometry analysis of ARF1 in MCF7 cell line, staining at 2-5ug for 1x10⁶cells (red line). The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate. Isotype control antibody was mouse IgG (black line).

ICC/IF analysis of ARF1 in MCF7 cell line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human ARF1 antibody (1:100) with goat anti-mouse IgG-Alexa fluor



Alexa488-anti-ARF1



For research use only. This product is not intended or approved for human, diagnostics or veterinary use.





ICC/IF analysis

ICC/IF analysis of ARF1 in U87MG cell line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human ARF1 antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).



General references: Amor, J. C., *et al.* (1994) *Nature.* **372**: 704-708. Claude, A., *et al.* (1999) *J. Cell Biol.* **146**: 71-84. Derrien, V., *et al.* (2002) *J.Cell Sci.* **115**: 2867-2879.

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.

