

Human IMPA1/IMP1 antibody

Catalog Number: ATGA0402

PRODUCT INFORMATION

Catalog number

ATGA0402

Clone No.

AT2G5

Product type

Monoclonal Antibody

UnitProt No.

P29218

NCBI Accession No.

NP_005527

Alternative Names

Inositol monophosphatase 1, IMPA, IMP, IMPase 1, Inositol monophosphatase 1

PRODUCT SPECIFICATION

Antibody Host

Mouse

Reacts With

Human

Concentration

1mg/ml (determined by BCA assay)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

Immunogen

Recombinant human IMPA1 (1-277aa) purified from E. coli

Isotype

IgG1 kappa

Purification Note

By protein-A affinity chromatography

Application

ELISA, WB, ICC/IF, FACS

Usage

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

Human IMPA1/IMP1 antibody

Catalog Number: ATGA0402

Storage

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

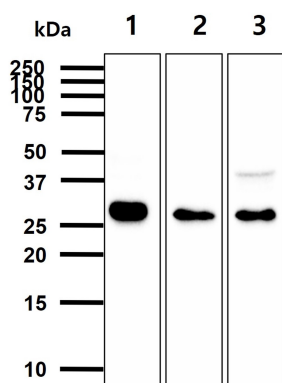
IMPA1 (inositol monophosphatase1) is responsible for the provision of inositol required for synthesis of phosphatidylinositol and polyphosphoinositides. It plays a key role in the phosphatidylinositol signaling pathway by catalyzing the hydrolysis of inositol monophosphates. This protein has been identified as the pharmacological target for lithium action in the brain.

General References

Ganzhorn AJ., et al. (1996) Biochemistry. 35(33): 10957-66.
Parthasarathy R., et al. (1997) Brain Res. 778(1): 99-106.
Ohnishi T., et al. (2007) J Biol Chem. 282(1): 637-46.

DATA

Western blot analysis (WB)



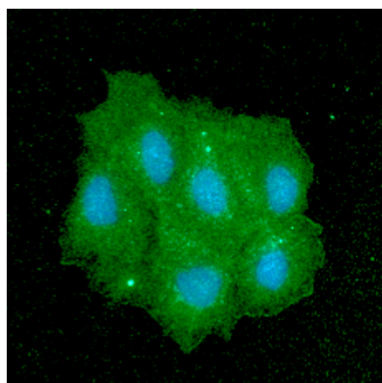
The cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human IMPA1 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

Lane 1.: Jurkat cell lysate

Lane 2.: Raji cell lysate

Lane 3.: NIH/3T3 cell lysate

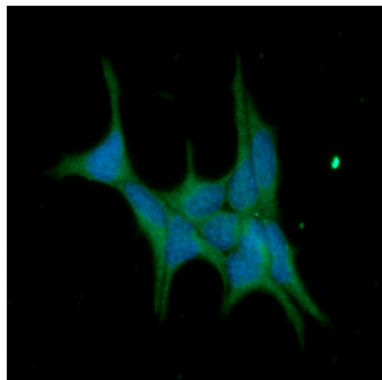
Immunocytochemistry/Immunofluorescence (ICC/IF)



ICC/IF analysis of IMPA1 in Hep3B cells. The cell was stained with ATGA0402 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

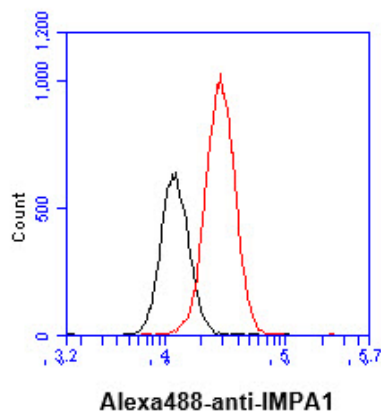
Human IMPA1/IMP1 antibody

Catalog Number: ATGA0402



ICC/IF analysis of IMPA1 in LNCap cells. The cell was stained with ATGA0402 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

Flow cytometry (FACS)



Flow cytometry analysis of IMPA1 in LNCap cell line, staining at 2-5ug for 1×10^6 cells (red line). The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate. Isotype control antibody was mouse IgG (black line).