DATASHEET

IMPA1 Rabbit Polyclonal Antibody

CAT. NO. APA12877

KEY FEATURES

Target	IMPA1	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Polyclonal
Applications	WB, IHC, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.	Storage	at-20°C

BACKGROUND

Phosphatase involved in the dephosphorylation of myo-inositol monophosphates to generate myo-inositol . Is also able to dephosphorylate scyllo-inositol-phosphate, myo-inositol 1,4-diphosphate, scyllo-inositol-1,3-diphosphate and scyllo-inositol-1,4-diphosphate . Also dephosphorylates in vitro other sugar-phosphates including D-galactose-1-phosphate, glucose-1-phosphate, glucose-6-phosphate, fructose-1-phosphate, beta-glycerophosphate and 2'-AMP . Responsible for the provision of inositol required for synthesis of phosphatidylinositols and polyphosphoinositides, and involved in maintaining normal brain function . Has been implicated as the pharmacological target for lithium (Li(+)) action in brain, which is used to treat bipolar affective disorder .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:2000
IHC	1:50 - 1:200
IF/ICC	1:10 - 1:100

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to IMPA1
Specificity	Recognizes endogenous levels of IMPA1 protein.
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human IMPA1
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 21; Observed: 30 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	IMPA; Inositol monophosphatase 1; IMP 1; IMPase 1; Inositol-1(or 4)-monophosphatase 1; Lithium-sensitive myo-inositol monophosphatase A1
Gene Symbol	IMPA1
Entrez Gene	3612(Human); 83523(Rat)
SwissProt	P29218(Human); O55023(Mouse); P97697(Rat)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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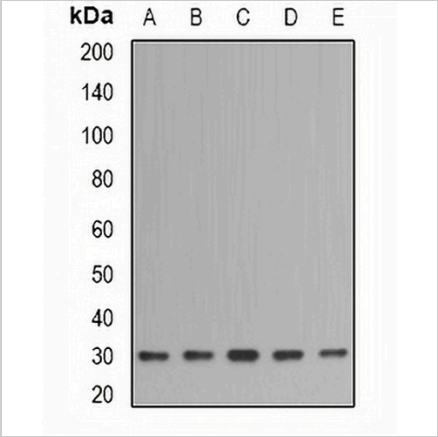
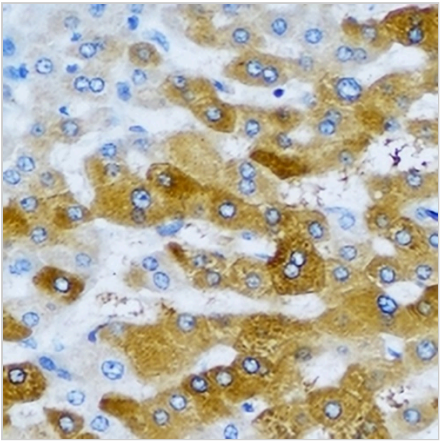
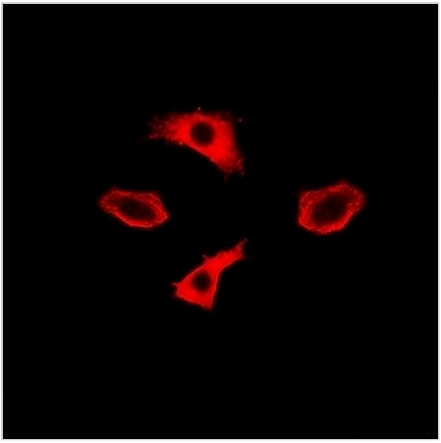
DATA



Western blot analysis of IMPA1 expression in SKOV3 (A), Jurkat (B), mouse liver (C), mouse brain (D), rat thymus (E) whole cell lysates. (Predicted band size: 21; 30; 36 kD; Observed band size: 30 kD)



Immunohistochemical analysis of IMPA1 staining in human liver cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of IMPA1 staining in A549 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.