

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human IMPA/IMP1 Peptide in direct ELISAs. Detects human, mouse, and rat IMPA/IMP1 in Western blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 984603
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Synthetic peptide containing human IMPA/IMP1 Peptide Accession # P29218
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

IMPA-1/inositol(myo)-1(or 4)-monophosphatase 1 is a ubiquitous enzyme with broad specificity, which is responsible for the provision of inositol required for synthesis of phosphatidylinositol and polyphosphoinositides. IMPA-1 dephosphorylates myo-inositol monophosphate to modulate intracellular signal transduction. IMPA-1 forms homodimers, and is abundantly expressed in brain. The magnesium-dependent phosphatase activity is inhibited by lithium, thereby depressing myo-inositol production, which may explain the anti-depressive and anti-manic effects of lithium therapy in bipolar disorder.

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