

## DESCRIPTION

|                                                                                                                                                                                                         |                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                           |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human IMPA1/IMP1 Peptide in direct ELISAs.                              |
| <b>Source</b>                                                                                                                                                                                           | Monoclonal Mouse IgG <sub>1</sub> Clone # 984604                                |
| <b>Purification</b>                                                                                                                                                                                     | Protein A or G purified from hybridoma culture supernatant                      |
| <b>Immunogen</b>                                                                                                                                                                                        | Synthetic peptide containing human IMPA/IMP1 Peptide<br>Accession # P29218      |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 750<br>Excitation Wavelength: 749 nm<br>Emission Wavelength: 775 nm |
| <b>Formulation</b>                                                                                                                                                                                      | 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.

|                             |                                                                        |
|-----------------------------|------------------------------------------------------------------------|
| <b>Immunocytochemistry</b>  | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunohistochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | 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.

## PRODUCT SPECIFIC NOTICES

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