

DESCRIPTION

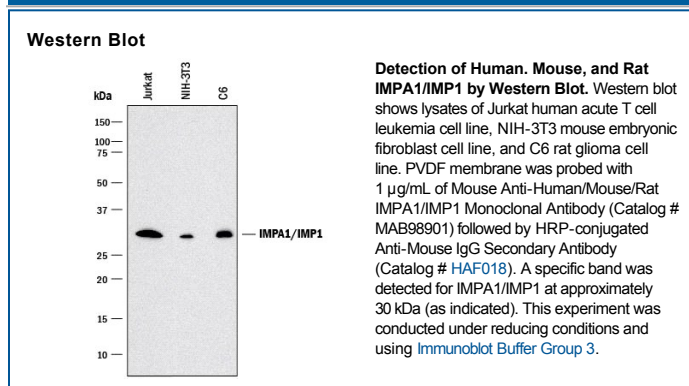
Species Reactivity	Human/Mouse/Rat
Specificity	Detects human IMPA/IMPA1 Peptide in direct ELISAs. Detects human, mouse, and rat IMPA/IMPA1 in Western blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 984603
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Synthetic peptide containing human IMPA/IMPA1 Peptide Accession # P29218
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

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.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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.