

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human PP1 Inhibitor-2 in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 488123
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human PP1 Inhibitor-2 Met1-Ser205 Accession # P41236
Conjugate	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 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

Protein Phosphatase 1 Inhibitor-2 (PP1 Inhibitor-2), also called PP1 regulatory subunit 2 (PP1R2), I2, and IPP2, binds to PP1 through an RVxF consensus sequence. The complex inactivates PP1, preventing it from dephosphorylating substrates such as glycogen phosphorylase. Unlike PP1 Inhibitor-1, the binding of PP1 Inhibitor-2 is Protein Kinase A phosphorylation-independent. Dissociation of the PP1 Inhibitor-2 complex is enhanced by phosphorylation at T72 by GSK-3, ERK, or CDK. Overexpression of PP1 Inhibitor-2 in mouse heart improves cardiac function without changing organ size.

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