

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human Inosine 5'-Monophosphate Dehydrogenase 2/IMPDH2 in direct ELISAs. Detects human, mouse and rat IMPDH2 in Western blots.
Source	Monoclonal Mouse IgG ₁ Clone # 911425
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human Inosine 5'-Monophosphate Dehydrogenase 2/IMPDH2 Met1-Phe514 Accession # P12268
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

IMP Dehydrogenase 2 (IMPDH2), also known as type II Inosine 5'-Monophosphate Dehydrogenase and IMPD2, is the rate-limiting enzyme in de novo guanine nucleotide biosynthesis. Along with closely related enzyme IMPDH1, IMPDH2 catalyzes the conversion of Inosine 5'-Phosphate (IMP) to Xanthosine 5'-Phosphate (XMP), and is responsible for maintaining the cellular guanine deoxy- and ribonucleotide pools required for DNA and RNA synthesis, respectively. IMPDH2 regulation is associated with cellular proliferation, transformation and differentiation, and its levels are selectively upregulated in neoplastic and replicating cells. Therefore, it has been evaluated as a target for anti-tumor, anti-infective and immunosuppressive drugs. Human IMPDH2 is a 56 kDa protein that shares 84% amino acid (aa) identity with human IMPDH1, and 98% aa identity with mouse and rat IMPDH2.

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