

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 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.