

IMPDH1 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP14691a**Specification**

IMPDH1 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [P20839](#)**IMPDH1 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 3614**Other Names**

Inosine-5'-monophosphate dehydrogenase 1 {ECO:0000255|HAMAP-Rule:MF_03156}, IMP dehydrogenase 1 {ECO:0000255|HAMAP-Rule:MF_03156}, IMPD 1 {ECO:0000255|HAMAP-Rule:MF_03156}, IMPDH 1 {ECO:0000255|HAMAP-Rule:MF_03156}, 111205 {ECO:0000255|HAMAP-Rule:MF_03156}, IMPDH-I, IMPDH1 {ECO:0000255|HAMAP-Rule:MF_03156}, IMPD1

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

IMPDH1 Antibody (N-term) Blocking Peptide - Protein Information**Name** IMPDH1 {ECO:0000255|HAMAP-Rule:MF_03156}**Synonyms** IMPD1**Function**

Catalyzes the conversion of inosine 5'-phosphate (IMP) to xanthosine 5'-phosphate (XMP), the first committed and rate-limiting step in the de novo synthesis of guanine nucleotides, and therefore plays an important role in the regulation of cell growth. Could also have a single-stranded nucleic acid-binding activity and could play a role in RNA and/or DNA metabolism. It may also have a role in the development of malignancy and the growth progression of some tumors.

Cellular Location

Cytoplasm {ECO:0000255|HAMAP-Rule:MF_03156, ECO:0000269|PubMed:14766016}. Nucleus {ECO:0000255|HAMAP-Rule:MF_03156, ECO:0000269|PubMed:14766016}

Tissue Location

IMP type I is the main species in normal leukocytes and type II predominates over type I in the

tumor

IMPDH1 Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

IMPDH1 Antibody (N-term) Blocking Peptide - Images

IMPDH1 Antibody (N-term) Blocking Peptide - Background

The protein encoded by this gene acts as a homotetramer to regulate cell growth. The encoded protein is an enzyme that catalyzes the synthesis of xanthine monophosphate (XMP) from inosine-5'-monophosphate (IMP). This is the rate-limiting step in the de novo synthesis of guanine nucleotides. Defects in this gene are a cause of retinitis pigmentosa type 10 (RP10). Several transcript variants encoding different isoforms have been found for this gene.

IMPDH1 Antibody (N-term) Blocking Peptide - References

Ohmann, E.L., et al. *Pediatr Transplant* 14(7):891-895(2010) Gensburger, O., et al. *Pharmacogenet. Genomics* 20(9):537-543(2010) Kagaya, H., et al. *Basic Clin. Pharmacol. Toxicol.* 107(2):631-636(2010) Ohmann, E.L., et al. *J. Heart Lung Transplant.* 29(5):509-516(2010) Shumei, L., et al. *Adv. Exp. Med. Biol.* 664, 293-297 (2010) :