

**IMPDH2 Antibody (Center) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP7390c****Specification**

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**IMPDH2 Antibody (Center) Blocking Peptide - Product Information**Primary Accession [P12268](#)**IMPDH2 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 3615**Other Names**

Inosine-5'-monophosphate dehydrogenase 2 {ECO:0000255|HAMAP-Rule:MF\_03156}, IMP dehydrogenase 2 {ECO:0000255|HAMAP-Rule:MF\_03156}, IMPD 2 {ECO:0000255|HAMAP-Rule:MF\_03156}, IMPDH 2 {ECO:0000255|HAMAP-Rule:MF\_03156}, 111205 {ECO:0000255|HAMAP-Rule:MF\_03156}, IMPDH-II, IMPDH2 {ECO:0000255|HAMAP-Rule:MF\_03156}, IMPD2

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP7390c](/products/AP7390c) was selected from the Center region of human IMPDH2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**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.

**IMPDH2 Antibody (Center) Blocking Peptide - Protein Information****Name** IMPDH2 ([HGNC:6053](#))**Synonyms** IMPD2**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 (PubMed: [7903306](http://www.uniprot.org/citations/7903306), PubMed: [7763314](http://www.uniprot.org/citations/7763314)). Could also have a single-stranded nucleic acid-binding activity and could play a role in RNA and/or DNA metabolism

(PubMed:<a href="http://www.uniprot.org/citations/14766016" target="\_blank">14766016</a>). It may also have a role in the development of malignancy and the growth progression of some tumors.

**Cellular Location**

Cytoplasm. Nucleus. Cytoplasm, cytosol. Note=Can form fiber-like subcellular structures termed 'cytoophidia' in response to intracellular guanine- nucleotide depletion.

**Tissue Location**

IMPDH1 is the main species in normal leukocytes and IMPDH2 predominates over IMPDH1 in the tumor

**IMPDH2 Antibody (Center) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**IMPDH2 Antibody (Center) Blocking Peptide - Images****IMPDH2 Antibody (Center) Blocking Peptide - Background**

IMPDH2 is the rate-limiting enzyme in the de novo guanine nucleotide biosynthesis. It is thus involved in maintaining cellular guanine deoxy- and ribonucleotide pools needed for DNA and RNA synthesis. The protein catalyzes the NAD-dependent oxidation of inosine-5'-monophosphate into xanthine-5'-monophosphate, which is then converted into guanosine-5'-monophosphate. Its gene is up-regulated in some neoplasms, suggesting it may play a role in malignant transformation.

**IMPDH2 Antibody (Center) Blocking Peptide - References**

Sombogaard,F., Pharmacogenet. Genomics 19 (8), 626-634 (2009)Mohamed,M.F., Genet. Test. 12 (4), 513-516 (2008)