

**Goat Anti-IMPDH2 Antibody**  
Peptide-affinity purified goat antibody  
Catalog # AF1565a

## Specification

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### Goat Anti-IMPDH2 Antibody - Product Information

Application	WB
Primary Accession	<a href="#">P12268</a>
Other Accession	<a href="#">NP_000875</a> , <a href="#">3615</a>
Reactivity	Human
Host	Goat
Clonality	Polyclonal
Concentration	0.5mg/ml
Isotype	IgG
Calculated MW	55805

### Goat Anti-IMPDH2 Antibody - 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}, 1.1.1.205 {ECO:0000255|HAMAP-Rule:MF\_03156}, IMPDH-II, IMPDH2 {ECO:0000255|HAMAP-Rule:MF\_03156}, IMPD2

#### Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

Goat Anti-IMPDH2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Goat Anti-IMPDH2 Antibody - 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:<a href="http://www.uniprot.org/citations/7763314" target="\_blank">7763314</a>, PubMed:<a href="http://www.uniprot.org/citations/7903306" target="\_blank">7903306</a>). 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

### **Goat Anti-IMPDH2 Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **Goat Anti-IMPDH2 Antibody - Images**



AF1565a (1 µg/ml) staining of Human Skeletal Muscle lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

### **Goat Anti-IMPDH2 Antibody - Background**

This gene encodes 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 encoded protein catalyzes the NAD-dependent oxidation of inosine-5'-monophosphate into xanthine-5'-monophosphate, which is then converted into guanosine-5'-monophosphate. This gene is up-regulated in some neoplasms, suggesting it may play

a role in malignant transformation.

### **Goat Anti-IMPDH2 Antibody - References**

Polymorphisms in type I and II inosine monophosphate dehydrogenase genes and association with clinical outcome in patients on mycophenolate mofetil. Gensburger O, et al. Pharmacogenet Genomics, 2010 Sep. PMID 20679962. Genetic polymorphisms influence mycophenolate mofetil-related adverse events in pediatric heart transplant patients. Ohmann EL, et al. J Heart Lung Transplant, 2010 May. PMID 20061166. Genetic variations in the HGPRT, ITPA, IMPDH1, IMPDH2, and GMPS genes in Japanese individuals. Kudo M, et al. Drug Metab Pharmacokinet, 2009. PMID 20045992. IMPDH2 genetic polymorphism: a promoter single-nucleotide polymorphism disrupts a cyclic adenosine monophosphate responsive element. Garat A, et al. Genet Test Mol Biomarkers, 2009 Dec. PMID 19810816. An inosine 5'-monophosphate dehydrogenase 2 single-nucleotide polymorphism impairs the effect of mycophenolic acid. Winnicki W, et al. Pharmacogenomics J, 2010 Feb. PMID 19770842.