

**KD-Validated Anti-IMPDH2 Rabbit Monoclonal Antibody**  
**Rabbit monoclonal antibody**  
**Catalog # AGI1076****Specification****KD-Validated Anti-IMPDH2 Rabbit Monoclonal Antibody - Product Information**

Application	WB, FC, ICC
Primary Accession	<a href="#">P12268</a>
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 56 kDa, observed, 56 kDa kDa
Gene Name	IMPDH2
Aliases	IMPDH2; Inosine Monophosphate Dehydrogenase 2; IMP (Inosine 5'-Monophosphate) Dehydrogenase 2; Inosine-5'-Monophosphate Dehydrogenase Type II; Inosine-5'-Monophosphate Dehydrogenase 2; IMP Dehydrogenase II; EC 1.1.1.205; IMPDH-II; IMPDH 2; IMPD 2; IMPD2; IMP (Inosine Monophosphate) Dehydrogenase 2; Inosine Monophosphate Dehydrogenase Type II; Epididymis Secretory Sperm Binding Protein; Inosine 5' Phosphate Dehydrogenase 2; IMP Dehydrogenase 2; IMP Oxireductase 2
Immunogen	A synthesized peptide derived from human IMPDH2

**KD-Validated Anti-IMPDH2 Rabbit Monoclonal Antibody - Additional Information**

Gene ID	3615
<b>Other Names</b>	Inosine-5'-monophosphate dehydrogenase 2, IMP dehydrogenase 2, IMPD 2, IMPDH 2, 1.1.1.205, Inosine-5'-monophosphate dehydrogenase type II, IMP dehydrogenase II, IMPDH-II, IMPDH2 ( <a href="http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=6053">http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=6053</a> target="_blank">HGNC:6053</a>), IMPD2

**KD-Validated Anti-IMPDH2 Rabbit Monoclonal 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

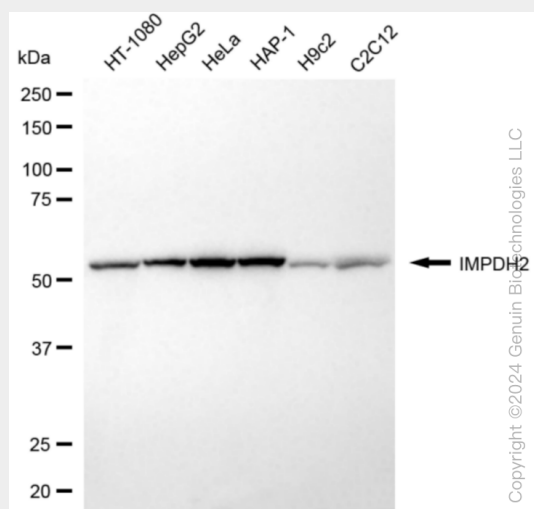
IMPDH1 is the main species in normal leukocytes and IMPDH2 predominates over IMPDH1 in the tumor

### KD-Validated Anti-IMPDH2 Rabbit Monoclonal Antibody - Protocols

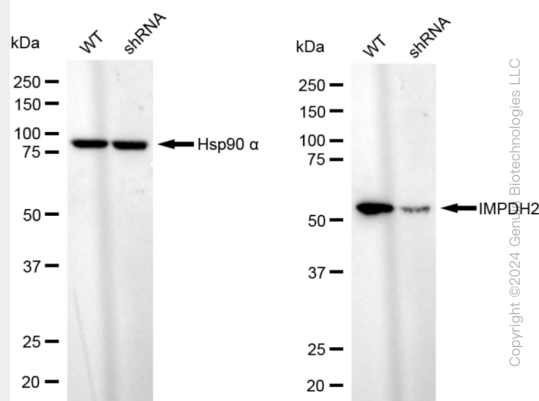
Provided below are standard protocols that you may find useful for product applications.

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

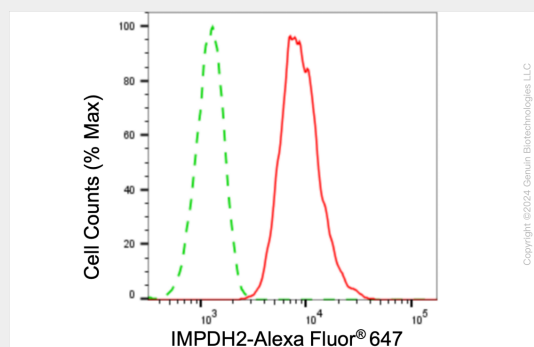
### KD-Validated Anti-IMPDH2 Rabbit Monoclonal Antibody - Images



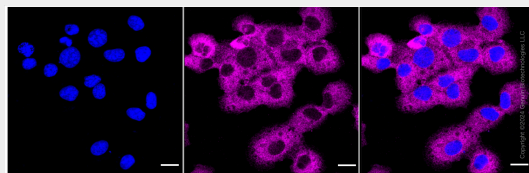
Western blotting analysis using anti-IMPDH2 antibody (Cat#AGI1076). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-IMPDH2 antibody (Cat#AGI1076, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-IMPDH2 antibody (Cat#AGI1076). IMPDH2 expression in wild type (WT) and IMPDH2 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-IMPDH2 antibody (Cat#AGI1076, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of IMPDH2 expression in HT-1080 cells using IMPDH2 antibody (Cat#AGI1076, 1:2,000). Green, isotype control; red, IMPDH2.



Immunocytochemical staining of HT-1080 cells with anti-IMPDH2 antibody (Cat#AGI1076, 1:1,000). Nuclei were stained blue with DAPI; IMPDH2 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.