

Product Name: KD-Validated IMPDH2 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA01748**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 55.8kDa

Antigen Information

Gene Name	IMPDH2
Alternative Names	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
Gene ID	3615.0
SwissProt ID	P12268
Immunogen	A synthesized peptide derived from human IMPDH2

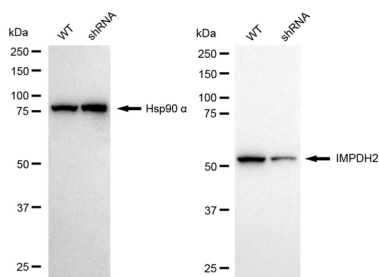
Background

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. [provided by RefSeq, Jul 2008]

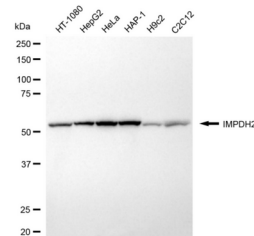
Research Area

Signal Transduction,Cancer,Metabolism

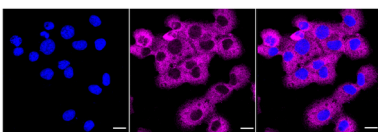
Image Data



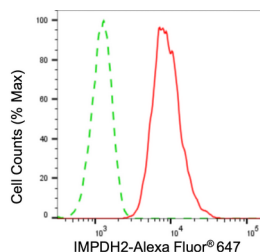
Western blotting analysis using IMPDH2 antibody (KVA01748). IMPDH2 expression in wild type (WT) and IMPDH2 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with IMPDH2 antibody (KVA01748, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using IMPDH2 antibody (KVA01748). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with IMPDH2 antibody (KVA01748, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HT-1080 cells with IMPDH2 antibody (KVA01748, 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.



Flow cytometric analysis of IMPDH2 expression in HT-1080 cells using IMPDH2 antibody (KVA01748, 1:2,000). Green, isotype control; red, IMPDH2.