

Active Recombinant Human IMPDH2

Cat. No. IMPDH2-83H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human IMPDH2 has been cloned by RT-PCR amplification of mRNA extracted from human hepatoma cells (sequence confirmed) and expressed in E.coli. Purified IMPDH 2 is an active enzyme characterized for its affinity for inosine 5'-monophosphate and NAD substrates, and its sensitivity to enzyme inhibitors such as mycophenolic acid and ribavirine-monophosphate.
Species	Human
Source	E.coli
Description	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.
Bio-activity	≥ 0.050 unit/mg protein.
Unit Definition	One unit of IMPDH Type II catalyzes the oxydation of 1 μmole of IMP to XMP per minute at pH 8.8 at 37 °C

GENE INFORMATION

Gene Name	IMPDH2 IMP (inosine 5'-monophosphate) dehydrogenase 2 [Homo sapiens (human)
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Official Symbol	IMPDH2
Synonyms	IMPDH2; IMP (inosine 5"-monophosphate) dehydrogenase 2; IMPD2; IMPDH-II; EC 1.1.1.205; Inosine-5"-monophosphate dehydrogenase 2; IMP dehydrogenase 2
Gene ID	3615
mRNA Refseq	NM_000884
Protein Refseq	NP_000875
MIM	146691
UniProt ID	P12268
Chromosome Location	3p21.2
Pathway	Drug metabolism - other enzymes; Metabolic pathways; Purine metabolism; Metabolism of nucleotides
Function	IMP dehydrogenase activity; metal ion binding; oxidoreductase activity; protein binding