Recombinant Human IMP (Inosine 5'-Monophosphate) Dehydrogenase 2, His-tagged

Cat. No. IMPDH2-1274H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human IMPDH2 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Species	Human
Source	Human
Description	IMPDH2 belongs to the IMPDH/GMPR family. It catalyzes the NAD-dependent oxidation of inosine-5''-monophosphate into xanthine-5''-monophosphate, which is then converted into guanosine-5''-monophosphate. 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. Also IMPDH1 and IMPDH2 are targets for the important immunosuppressive drug, mycophenolic acid (MPA).
Form	Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 2mM DTT, 20% glycerol, 150mM NaCl
Molecular Weight	58.0kDa (534aa)
Purity	> 90% by SDS - PAGE
Concentration	0.5mg/ml (determined by Bradford assay)

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Sequences of amino acids	MGSSHHHHHH SSGLVPRGSH MADYLISGGT SYVPDDGLTA QQLFNCGDGL TYNDFLILPG YIDFTADQVD LTSALTKKIT LKTPLVSSPM DTVTEAGMAI AMALTGGIGF IHHNCTPEFQ ANEVRKVKKY EQGFITDPVV LSPKDRVRDV FEAKARHGFC GIPITDTGRM GSRLVGIISS RDIDFLKEEE HDCFLEEIMT KREDLVVAPA GITLKEANEI LQRSKKGKLP IVNEDDELVA IIARTDLKKN RDYPLASKDA KKQLLCGAAI GTHEDDKYRL DLLAQAGVDV VVLDSSQGNS IFQINMIKYI KDKYPNLQVI GGNVVTAAQA KNLIDAGVDA LRVGMGSGSI CITQEVLACG RPQATAVYKV SEYARRFGVP VIADGGIQNV GHIAKALALG ASTVMMGSLL AATTEAPGEY FFSDGIRLKK YRGMGSLDAM DKHLSSQNRY FSEADKIKVA QGVSGAVQDK GSIHKFVPYL IAGIQHSCQD IGAKSLTQVR AMMYSGELKF EKRTSSAQVE GGVHSLHSYE KRLF
Storage	Can be stored at +4C short term (1-2 weeks). For long term storage, aliquot and store at -20C or -70C. Avoid repeated freezing and thawing cycles.
Pathways	Drug metabolism - other enzymes; Metabolic pathways; Purine metabolism; Purine ribonucleoside monophosphate biosynthesis

GENE INFORMATION

Gene Name	IMPDH2 IMP (inosine 5"-monophosphate) dehydrogenase 2 [Homo sapiens]
Official Symbol	IMPDH2
Synonyms	IMPDH2; IMPDH 2; IMPD2; IMPD 2; IMP (inosine 5"-monophosphate) dehydrogenase 2; IMP (inosine monophosphate) dehydrogenase 2; IMPDH-II; IMP oxireductase 2; inosine 5" phosphate dehydrogenase 2; inosine monophosphate dehydrogenase type II; IMP dehydrogenase 2; inosine-5"-monophosphate dehydrogenase 2; IMP dehydrogenase 2; EC 1.1.1.205; OTTHUMP00000210556

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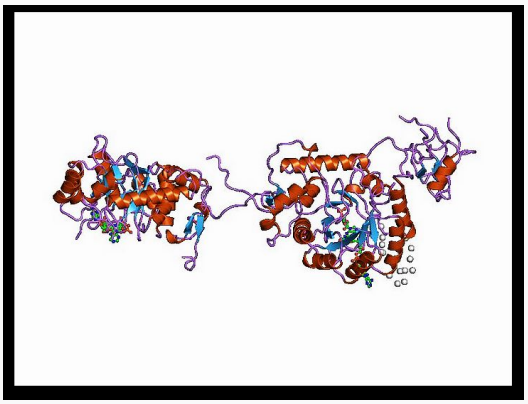
Gene ID	3615
mRNA Refseq	NM_000884
Protein Refseq	NP_000875
MIM	146691
UniProt ID	P12268
Chromosome Location	3p21.2
Function	IMP dehydrogenase activity; metal ion binding; nucleotide binding; oxidoreductase activity; protein binding
PDB rendering based on1b3o.	

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