

## Recombinant Human IMPDH2, His-tagged

**Cat. No.** IMPDH2-28270TH    **Lot. No.** (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant full length Human IMPDH2 with N-terminal His tag. 534 amino acids with a MWt 58kDa including tag.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	514 amino acids
<b>Description</b>	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.
<b>Conjugation</b>	HIS
<b>Molecular Weight</b>	58.000kDa inclusive of tags
<b>Tissue specificity</b>	IMP type I is the main species in normal leukocytes and type II predominates over type I in the tumor.
<b>Form</b>	Liquid

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

<b>Purity</b>	>90% by SDS-PAGE
<b>Storage buffer</b>	pH: 8.00 Constituents: 0.32% Tris HCl, 0.03% DTT, 20% Glycerol, 0.88% Sodium chloride
<b>Storage</b>	Store at +4°C short term (1-2 weeks). Aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
<b>Sequences of amino acids</b>	<p>MGSSHHHHHSSGLVPRGSHMADYLISGGTSYVPDDGLTAQQLFNCGDGLTYNDF  LILPGYIDFTADQVDLTSALTKKITLKTPLVSSPMDTVTEAGMAIAMALTGGIGFIHHNC  TPEFQANEVRKVKKYEQGFITDPVVLSPKDRVRDVFEAKARHGFCGIPITDTGRMGS  RLVGISSRDIDFLKEEEHDCFLEEIMTKREDLVVAPAGITLKEANEILQRSKKGKLPV  NEDDELVAIIARTDLKKNRDYPLASKDAKKQLLGGAAIGTHEDDKYRLDLLAQAGVDV  VVLDSQGNSIFQINMIKIYKDKYPNLQVIGGNVVTAAQAKNLIDAGVDALRVGMGSG  SICITQEVLACGRPQATAVYKVSEYARRFGVPVIADGGIQNVGHIKALALGASTVMM  GSLLAATTEAPGEYFFSDGIRLKKYRGMGSLDAMDKHLSSQNRYPSEADKIKVAQG  VSGAVQDKGSIHKFVPLYAGIQHSCQDIGAKSLTQVRAMMYSGELKFEKRTSSAQV  EGGVHSLHSYEKRLF</p>
<b>Sequence Similarities</b>	Belongs to the IMPDH/GMPR family. Contains 2 CBS domains.
<b>GENE INFORMATION</b>	
<b>Gene Name</b>	IMPDH2 IMP (inosine 5-monophosphate) dehydrogenase 2 [ Homo sapiens ]
<b>Official Symbol</b>	IMPDH2
<b>Synonyms</b>	IMPDH2; IMP (inosine 5-monophosphate) dehydrogenase 2; inosine-5-monophosphate dehydrogenase 2;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

<b>Gene ID</b>	3615
<b>mRNA Refseq</b>	NM_000884
<b>Protein Refseq</b>	NP_000875
<b>Uniprot ID</b>	P12268
<b>Chromosome Location</b>	3p21.2
<b>Pathway</b>	Drug metabolism - other enzymes, organism-specific biosystem; Drug metabolism - other enzymes, conserved biosystem; Metabolic pathways, organism-specific biosystem; Metabolism, organism-specific biosystem; Metabolism of nucleotides, organism-specific biosystem;
<b>Function</b>	DNA binding; IMP dehydrogenase activity; RNA binding; metal ion binding; nucleotide binding;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA