

Recombinant Human Guanine Monphosphate Synthetase, His-tagged

Cat. No. GMPS-1927H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant humanGMPS protein, fused to His-tag at N-terminus, was expressed in E. coli andpurified by using conventional chromatography techniques.
Species	Human
Description	GMPSynthase, also known as GMPS, is involved in purine biosynthesis. Existing asa homodimer, GMPS catalyzes the last step in the GMP synthesis pathway,namely the ATP-dependent amination of XMP to GMP.
Form	Liquid. In 20mMTris-HCl buffer (pH 8.0) containing 1mM DTT, 30% glycerol, 0.1M NaCl.
Molecular Weight	79.2 kDa(717aa)
Purity	> 90%by SDS-PAGE
Concentration	0.5mg/ml (determined by Bradford assay)
Sequences of aminoacids	MGSSHHHHHHSSGLVPRGSH MGSHMALCNG DSKLENAGGD LKDGHHHYEG AV VILDAGAQ YGKVIDRRVRELFVQSEIFP LETPAFAIKE QGFRAIIISG GPNSVYAEDA PWFDP AIFTIGKPV LGICYG MQMMNKVFGG TVHKKSVRED GVFNISVDNT CSLFR GLQKE EVVLLTHGDS VDKVADGFKVVARSGNIVAG IANESKKLYG AQFHPEVGLT ENGVILKNF LYDIAGCSGT FTVQNRELEC IREIKERVGT SKVLVLLSGGV DSTVCT ALLNRALNQE QVI AVHIDNGFMR KRESQSVEEA LKKLGIQVKV INAAHSFYNG TTT

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LPISEDED RTPRKRIKSTLNMTTSPEEKRKIIGDTFVKIANEVIGEMN LKPEEVFLAQ G
 TLRPD LIES ASLVASGKAE LIKTHHNDTE LIRKLREEGK VIEPLKDFHKDEVIRILGRE
 LGLPEELVSRHPFPGLAIR VICAEEPYIC KDFPETNNIL KIVADFSASV KKPHTLL
 QRV KACTTEEDQE KLMQITSLHSLNAFLPLIKT VGVQGDGRSY SYVCGISSKD EP
 DWESLIFL ARLIPRMCHN VNRVVYIFGP PVKEPPTDVTPTFLTGTGVL TLRQADFE
 AH NILRESGYAG KISQMPVILTPLHFDRLPLQ KQPSCQRSVV IRTFITSDFM TGIPA
 TPGNE IPVEVVLKVM TEIKKIPGIS RIMYDLTSKPPGTTEWE

Storage

Can bestored at +4°C short term (1-2 weeks). For long term storage, aliquot andstore at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

Pathways

Drug metabolism-other enzymes; Metabolicpathways; Metabolism; Metabolism of nucleotides; Purine metabolism; Purineribonucleoside monophosphate biosynthesis

GENE INFORMATION

Gene Name

GMPS guanine monphosphatesynthetase [Homo sapiens]

Official Symbol

GMPS

Synonyms

GMPS; guanine monphosphate synthetase; GMPsynthase [glutamine-hydrolyzing]; GMP synthase; GMP synthetase; MLL/GMPSfusion protein; glutamine amidotransferase; guanosine 5"-monophosphatesynthase; EC 6.3.5.2

Gene ID

8833

mRNA Refseq

NM_003875

Protein Refseq

NP_003866

MIM

600358

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UniProt ID	P49915
Chromosome Location	3q24
Function	ATP binding; GMP synthase(glutamine-hydrolyzing) activity; GMP synthase activity; ligase activity;nucleotide binding
Rendering based on	PDB 2VPI.

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