



# Recombinant Human GMP synthase [glutamine-hydrolyzing] (GMPS)

<b>Product Code</b>	CSB-EP009582HU-B
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P49915
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	ALCNGDSKL ENAGGDLKDG HHHYEGAVVI LDAGAQYGKV IDRRVRELFV QSEIFPLETP AFAIKEQGFR AIIISGGPNS VYAEDAPWFD PAIFTIGKPV LGICYGMQMM NKVFGGTVHK KSVREDGVFN ISVDNTCSLF RGLQKEEVVL LTHGDSVDKV ADGFKVVARV GNIVAGIANE SKKLYGAQFH PEVGLTENGK VILKNFLYDI AGCSGTFTVQ NRELECIREI KERVGTSKVL VLLSGGVDST VCTALLNRAL NQEQVIKVHI DNGFMRKRES QSVEEALKKL GIQVKVINAA HSFYNGTTTL PISDEDRTPR KRISKTLNMT TSPEEKRKII GDTFVKIANE VIGEMNLKPE EVFLAQGTLR PDLIESASLV ASGKAELIKT HNDTELIRK LREEGKVIK LKDFHKDEVR ILGRELGLPE ELVSRHPFPG PGLAIRVICA EOPYICKDFP ETNNILKIVA DFSASVKKPH TLLQRVKACT TEEDQEKLMO ITSLHSLNAF LLPIKTVGVQ GDCRSYSYVC GISSKDEPDW ESLIFLARLI PRMCHNVNRV VYIFGPPVKE PPTDVTPTFL TTGVLSTLRQ ADFEAHNILR ESGYAGKISQ MPVILTPLHF DRDPLQKQPS CQRSVVIRTF ITSDFMTGIP ATPGNEIPVE VVLKVMTEIK KIPGISRIMY DLTSKPPGTT EWE
<b>Source</b>	E.coli
<b>Target Names</b>	GMPS
<b>Protein Names</b>	Recommended name: GMP synthase [glutamine-hydrolyzing] EC= 6.3.5.2 Alternative name(s): GMP synthetase Glutamine amidotransferase
<b>Expression Region</b>	2-693
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full Length of Mature Protein
<b>Target Details</b>	In the de novo synthesis of purine nucleotides, IMP is the branch point metabolite at which point the pathway diverges to the synthesis of either guanine or adenine nucleotides. In the guanine nucleotide pathway, there are 2 enzymes involved in converting IMP to GMP, namely IMP dehydrogenase (IMPD1), which catalyzes the oxidation of IMP to XMP, and GMP synthetase, which catalyzes the amination of XMP to GMP.
<b>Reconstitution</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a



concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

### Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.