

32-2378: GMPS Recombinant Protein

Alternative Name :

GMP synthase [glutamine-hydrolyzing], GMP synthetase, Glutamine amidotransferase, GMPS, Guanine monophosphate synthetase, GMP synthase, guanosine 5'-monophosphate synthase, MLL/GMPS fusion protein.

Description

Source : Escherichia Coli. GMPS Human Recombinant produced in E.coli is a single, non-glycosylated polypeptide chain containing 717 amino acids (1-693) and having a molecular mass of 79.2kDa. GMPS is fused to a 24 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques. GMP synthase (GMPS) is involved in purine biosynthesis. GMPS, which is a homodimer, catalyzes the last step in the GMP synthesis pathway, specifically the ATP-dependent amination of XMP to GMP. GMPS is comprised of one GMP-binding domain and one glutamine amidotransferase type-1 domain through which it communicates its catalytic activity. GMPS is engaged in the de novo synthesis of guanine nucleotides which are not only vital for DNA and RNA synthesis, but also supply GTP, which is involved in several cellular processes important for cell division. GMPS gene chromosomal translocations are linked with acute myeloid leukemias, suggesting a possible role for GMPS in carcinogenesis.

Product Info

Amount : 10 µg

Purification : Greater than 90.0% as determined by SDS-PAGE.

Content : The GMPS solution (0.5mg/ml) contains 20mM Tris-HCl buffer (pH 8.0), 1mM DTT, 30% glycerol and 0.1M NaCl.

Storage condition : Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Amino Acid : MGSSHHHHHH SSGLVPRGSH MGSHMALCNG DSKLENAGGD LKDGHHHYEG AVVILDAGAQ YGKVIDRRVR ELVQSEIFP LETPAFAIKE QGFRAIISG GPNSVYAEDA PWFDPAIFTI GKPVLGICYG MQMMNKVFGG TVHKKSVRED GVFNISVDNT CSLFRGLQKE EVVLLTHGDS VDKVADGFKV VARSGNIVAG IANESKKLYG AQFHPEVGLT ENGKVLKNF LYDIAGCSGT FTVQNRELEC IREIKERVGT SKVLVLLSGG VDSTVCTALL NRALNQEQVI AVHIDNGFMR KRESQSVEEA LKKLGIQVKV INAAHSFYNG TTTLPISEDE RTPRKRISKT LNMTTSPEEK RKIIGDTFVK IANEVIGEMN LKPEEVFLAQ GTLRPDLIES ASLVASGKAE LIKTHHNDTE LIRKLREEGK VIEPLKDFHK DEVRILGREL GLPEELVSRH PFPGPGLAIR VICAEOPYIC KDFPETNNIL KIVADFSASV KKPHTLLQRV KACTTEEDQE KLMQITSLHS LNAFLPIKT VGVQGDGRSY SYVCGISSKD EPDWESLIFL ARLIPRMCHN VNRVYIFGP PVKEPPTDVT PTFLTGTGVS TLRQADFEAH NILRESGYAG KISQMPVILT PLHFDRDPLQ KQPSCQRSVV IRTFITSDFM TGIPATPGNE IPVEVVLKMV TEIKKIPGIS RIMYDLTSKP PGTTWE.

