
Product Data Sheet

Product Name: GSS Human
 Cat. No.: GP21733
 Batch No.: 1

Product Data

Purity	>98%	Source	Escherichia Coli.
Physical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	Glutathione synthetase; GSH synthetase; GSH-S; Glutathione synthase; GSHS; MGC14098; GSS.		
Amino Acid Sequence	MGSSHHHHQH SSGLVPRGSH MATNWGSLQ DKQQLEELAR QAVDRALAEG VLLRTSQEPT SSEVVSYPF TLFPSLVPSA LLEQAYAVQM DFNLLVDAVS QNAAFLEQTL SSTIKQDDFT ARLFDIHKQV LKEGIAQTVF LGLNRSYMF QRSADGSPAL KQIEINTISA SFGGLASRTP AVHRHVLSVL SKTKEAGKIL SNNPSKGLAL GIAKAWELYG SPNALVLLIA QEKERNIFDQRAIENELLAR NIHVIRRTFE DISEKGLDQ DRRLFVDGQE IAVVYFRDGY MPRQYSLQNW EARLLERSH AAKCPDIATQ LAGTKKVQQE LSRPGMLEML LPGQPEAVAR LRATFAGLYS LDVGEEGDQA IAEALAAPSR FVLKPQREGG GNNLYGEEMV QALKQLKDSE ERASYILMEK IEPEPFENCL LRPGSPARVV QCISELGFIFG VYVRQEKTIV MNKHVGHLLR TKAIEHADGG VAAGVAVLND PYPV.		
Formulation	The GSS solution (1mg/ml) contains 20mM Tris-HCl buffer (pH 8.0), 1mM DTT and 10% glycerol.		

Introduction

Glutathione synthetase (GSS) is the second enzyme in the glutathione biosynthesis pathway. GSS catalyses the condensation of gamma-glutamylcysteine and glycine to form glutathione. Defects in the GSS are the cause of glutathione synthetase deficiency aka GSS deficiency or 5-oxoprolinuria or pyroglutamic aciduria, which is a severe form characterized by an increased rate of hemolysis and defective function of the central nervous system.

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer

Caution: Product has not been fully validated for medical applications. For research use only.

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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.

Background

GSS Human Recombinant fused with a 20 amino acid His tag at N-terminus produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 494 amino acids (1-474 a.a.) and having a molecular mass of 54.5kDa. The GSS is purified by proprietary chromatographic techniques.

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