

**GSS, 1-474aa, Human, His tag, E.coli**

**Cat.NO.: TP02346**

3th Edition

**Synonyms:** Glutathione synthetase, GSHS, GSH synthetase

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

**Form:** Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol

**Molecular Weight:** 54.5 kDa (494aa) confirmed by MALDI-TOF

**Sequences:**

MGSSHHHHQHSSGLVPRGSHMATNWGSLLQDKQQLEELARQAVDRALAEGVLLRTSQEPTSSEVVSYAPFTLFP  
SLVPSALLEQAYAVQMDFNLLVDAVSQNAAFLEQTLSSSTIKQDDFTARLFDIHKQVLKEGIAQTVFLGLNRS DYMFQ  
RSADGSPALKQIEINTISASFGGLASRTPAVHRHVL SVLSKTKEAGKILSNNPSKGLALGIAKAWELYGSPNALVLLIA  
QEKERNIFDQRAIENELLARNIHVIRRTFEDISEKGS LDQDRRLFVDGQEIAVVYFRDGYMPRQYSLQNWEARLLLE  
RSHAAKCPDIATQLAGTKKVQQELSRPGMLEMLLP GQPEAVARLRATFAGLYSLDVGEEGDQAIAEALAAPS RFVL  
KPQREGGNNLYGEEMVQALKQLKDSEERASYILMEKIEPEPFENCLLRPGSPARVVQCISELGIFGVYVRQEKT LV  
MNKHVGHLLRTKAIEHADGGVAAGVAVL DNPYPV

**Purity:** > 95% by HPLC

**Concentration:** 1 mg/ml (determined by Bradford assay)

**Endotoxin Level:** <1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.