

## Recombinant Human GSS, His-tagged

Cat. No. GSS-26092TH Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant full length protein, corresponding to amino acids 1-474 of Human Glutathione Synthetase with N terminal His tag, MWt 56kDa.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	1-474 a.a.
<b>Description</b>	Glutathione is important for a variety of biological functions, including protection of cells from oxidative damage by free radicals, detoxification of xenobiotics, and membrane transport. The protein encoded by this gene functions as a homodimer to catalyze the second step of glutathione biosynthesis, which is the ATP-dependent conversion of gamma-L-glutamyl-L-cysteine to glutathione. Defects in this gene are a cause of glutathione synthetase deficiency.
<b>Conjugation</b>	HIS
<b>Form</b>	Lyophilised:Reconstitute with 41 µl aqua dest.
<b>Storage buffer</b>	Preservative: None Constituents: 0.5% Trehalose, 6M Urea, 100mM Sodium phosphate, 10mM Sodium chloride, pH 4.5
<b>Storage</b>	Shipped at 4°C. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.

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**Sequences of amino acids**

MATNWGSELLQDKQQLEELARQAVDRALAEGVLLRRTSQEPT SSEVVSYPFTLFPSSL  
 VPSALLEQAYAVQMDFNLLVDA VSQNAAFLEQTLSSSTIKQDDFTARLFDIHKQVLKE  
 GIA QTVFLGLNRSYMFQRSADGSPALKQIEINTISASFGG LASRTPAVHRHVLVSL  
 SKTKEAGKILSNPSPKGLALGIAK AWELYGSPNALVLLIAQEKERNIFDQRAIENELLA  
 RNI HVIRRTFEDISEKGSLLDQDRRLFVDGQEIAVVYFRDGY MPRQYSLQNWEARLL  
 LERSHAAKCPDIATQLAGTKKVQ QELSRPGMLEMLLPQGQPEAVARLRATFAGLYSL  
 DVGEE GDQAI AEALAAPSRFVLKPKQREGGGNNLYGEEMVQALKQL KDSEERASYI  
 LMEKIEPEPFENCLLRPGSPARVVQCIS ELGIFGVYVRQEKTLVMNKHVGHLLRTKAI  
 EHADGGVA AGVAVLDNPYPV

**Sequence Similarities**

Belongs to the eukaryotic GSH synthase family.

**Full Length**

Full L.

## GENE INFORMATION

**Gene Name**

[GSS glutathione synthetase \[ Homo sapiens \]](#)

**Official Symbol**

[GSS](#)

**Synonyms**

GSS; glutathione synthetase;

**Gene ID**

[2937](#)

**mRNA Refseq**

[NM\\_000178](#)

**Protein Refseq**

[NP\\_000169](#)

**MIM**

[601002](#)

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<b>Uniprot ID</b>	P48637
<b>Chromosome Location</b>	20q11.2
<b>Pathway</b>	Biological oxidations, organism-specific biosystem; Glutathione biosynthesis, glutamate => glutathione, organism-specific biosystem; Glutathione biosynthesis, glutamate => glutathione, conserved biosystem;
<b>Function</b>	ATP binding; glutathione binding; glutathione synthase activity; glycine binding; ligase activity;

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