

## Recombinant Human GSS Protein (His Tag)

Catalog Number: PKSH032497

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

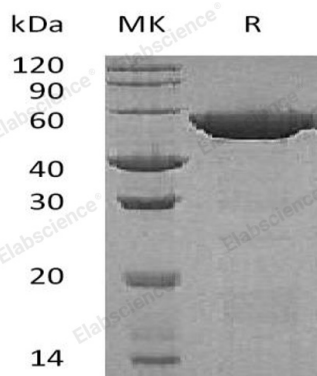
### Description

<b>Species</b>	Human
<b>Source</b>	E.coli-derived Human GSS protein Ala2-Val474, with an C-terminal His
<b>Calculated MW</b>	53.5 kDa
<b>Observed MW</b>	55 kDa
<b>Accession</b>	P48637
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Concentration</b>	Subject to label value.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
<b>Shipping</b>	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.
<b>Formulation</b>	Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 200mM NaCl, pH 7.5.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

Glutathione Synthetase belongs to the eukaryotic GSH synthase family. Glutathione Synthetase is the second enzyme in the glutathione biosynthesis pathway. It catalyses the condensation of gamma-glutamylcysteine and glycine to form glutathione. Glutathione play an important role in a variety of biological functions, including detoxification of xenobiotics, protection of cells from oxidative damage by free radicals, and membrane transport. The protein 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 Glutathione Synthetase can also cause the glutathione synthetase deficiency of erythrocytes, which is a mild form causing hemolytic anemia.