

# **Screening Libraries**

**Proteins** 



# **Product** Data Sheet

# **HELPY Protein, Helicobacter pylori**

Cat. No.: HY-P702129

Synonyms: Glutathione hydrolase proenzyme

Species: E. coli Source:

Accession: O25743 (S25-F567, T380A)

Gene ID:

Molecular Weight:

	$\mathbf{a}$	пг		TE C
1217	4 8 1	PF	КΙ	TES
_		_		

Appearance	Solution.
Formulation	Supplied as a 0.22 μm filtered solution of 50 mM Tris-HCl, pH7.5, 200 mM NaCl, 20% glycerol.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	Please use rapid thawing with running water to thaw the protein.
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

# **DESCRIPTION**

## Background

pylorigamma-glutamyltranspeptidase (HpGT) is expressed as a 60-kDa inactive precursor that must undergo autocatalytic processing to generate a 40-kDa/20-kDa heterodimer with full gamma-glutamyl amide bond hydrolase activity. The resultant N terminus, Thr-380, has been shown to be the catalytic nucleophile in both the autoprocessing and enzymatic reactions. HpGT is a member of the N-terminal nucleophile hydrolase superfamily. HpGT has also been shown to upregulate COX-2 and epidermal growth factor-related peptides in human gastric mucosal cells and to induce apoptosis in human gastric epithelial cells<sup>[1]</sup>.

Helicobacter pylori γ-glutamyltranspeptidase (HpGT) catalyzes the first step in glutathione degradation, removing glutamate from the tripeptide and its conjugates via a  $\gamma$ -glutamylenzyme intermediate. The  $\gamma$ -glutamyl group can be transferred to water (hydrolysis) or an amino acid or short peptide (transpeptidation)<sup>[2]</sup>.

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

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA

Page 1 of 1