

Datasheet for ABIN3092760

GGT1 Protein (AA 27-569) (His tag)[Go to Product page](#)

4 Images

Overview

Quantity:	1 mg
Target:	GGT1
Protein Characteristics:	AA 27-569
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This GGT1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	HHHHHHPSAS KEPDNHVVYTR AAVAADAKQC SKIGRDALRD GGSADVAAIA ALLCVGLMNA HSMGIGGGGLF LTIYNSTTRK AEVINAREVA PRLAFATMFN SSEQSQKGGGL SVAVPGEIRG YELAHQRHGR LPWARLFQPS IQLARQGFPV GKGLAAALEN KRTVIEQQPV LCEVFCRDRK VLREGERLTL PQLADTYETL AIEGAQAFYN GSLTAQIVKD IQAAGGIVTA EDLNNYRAEL IEHPLNISLG DVVLYMPSAP LSGPVLALIL NILKGYNFSR ESVESPEQKG LTYHRIVEAF RFAYAKRTLL GDPKFVDVTE VVRNMTSEFF AAQLRAQISD DTHHPISYYK PEFYTPDDGG TAHLSVVAED GSAVSATSTI NLYFGSKVRS PVSGILFNNE MDDFSSPSIT NEFGVPPSPA NFIQPGKQPL SSMCPTIMVG QDGQVRMVVG AAGGTQITTA TALAIYNLW FGVDVKRAVE EPRLHNQLLP NVTTVERNID QAVTAALETR HHHTQIASTF IAVVQAIVRT AGGWAAASDS RKGGEAGY
Specificity:	N-terminaler His-Tag

Product Details

- Characteristics:
- Made in Germany - from design to production - by highly experienced protein experts.
 - Human GGT1 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
 - State-of-the-art algorithm used for plasmid design (Gene synthesis).

This made-to-order protein has already been successfully produced. Please let us know if you are interested in purchasing a smaller amount of this protein. We will check our stock and make you a customized quote in case we can provide this protein in a smaller amount..

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the ExPASy's protparam tool to determine the absorption coefficient of each protein.

Purification: The protein is purified from the cleared cell lysate using DTT resistant His-tag capture materials. Eluate fractions are analyzed by SDS-PAGE. Protein containing fractions are subjected to a second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity: >95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility: 0.22 µm filtered

Endotoxin Level: Endotoxin has not been removed. Please contact us if you require endotoxin removal.

Grade: Crystallography grade

Target Details

Target: GGT1

Alternative Name: GGT1 ([GGT1 Products](#))

Background: Cleaves the gamma-glutamyl bond of extracellular glutathione (gamma-Glu-Cys-Gly), glutathione conjugates, and other gamma-glutamyl compounds. The metabolism of glutathione releases free glutamate and the dipeptide, cysteinyl-glycine, which is hydrolyzed to cysteine and glycine by dipeptidases. In the presence of high concentrations of dipeptides and some amino acids, can also catalyze a transpeptidation reaction, transferring the gamma-glutamyl moiety to an acceptor amino acid to form a new gamma-glutamyl compound. Initiates

Target Details

extracellular glutathione (GSH) breakdown, provides cells with a local cysteine supply and contributes to maintain intracellular GSH level. It is part of the cell antioxidant defense mechanism. Isoform 3 seems to be inactive. {ECO:0000269|PubMed:20622017, ECO:0000269|PubMed:24047895, ECO:0000269|PubMed:7673200, ECO:0000269|PubMed:7759490, ECO:0000269|PubMed:8095045, ECO:0000269|PubMed:8827453}.

Molecular Weight: 59.5 kDa Including tag.

UniProt: [P19440](#)

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Comment: In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: 150 mM NaCl, 20 mM NaH₂PO₄, pH 7.4; 10 % Glycerol

Handling Advice: Avoid repeated freeze-thaw cycles.

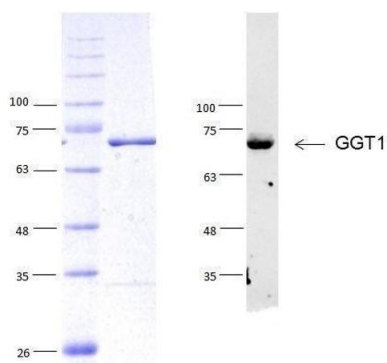
Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: Unlimited (if stored properly)



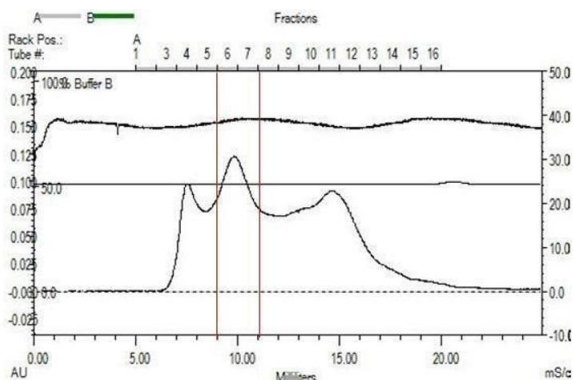
Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process



Western Blotting

Image 2.

GGT1 (AA 27-596) His
tag, fraction 6 + 7



Size-exclusion chromatography-High Pressure Liquid Chromatography

Image 3.

GGT1 (AA 27-596) gel filtration
Superdex 200 10 /300 GL

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN3092760.