

**GGT1 Antibody (internal region, near N-Term)**  
Peptide-affinity purified goat antibody  
Catalog # AF3949a

**Specification**

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**GGT1 Antibody (internal region, near N-Term) - Product Information**

Application	WB
Primary Accession	<a href="#">P19440</a>
Other Accession	<a href="#">NP_005256.2</a> , <a href="#">2678</a>
Reactivity	Human
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	61410

**GGT1 Antibody (internal region, near N-Term) - Additional Information**

**Gene ID** 2678

**Other Names**

Gamma-glutamyltranspeptidase 1, GGT 1, 2.3.2.2, Gamma-glutamyltransferase 1, Glutathione hydrolase 1, 3.4.19.13, Leukotriene-C4 hydrolase, 3.4.19.14, CD224, Gamma-glutamyltranspeptidase 1 heavy chain, Gamma-glutamyltranspeptidase 1 light chain, GGT1, GGT

**Format**

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

GGT1 Antibody (internal region, near N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

**GGT1 Antibody (internal region, near N-Term) - Protein Information**

**Name** GGT1

**Synonyms** GGT

**Function**

Cleaves the gamma-glutamyl bond of extracellular glutathione (gamma-Glu-Cys-Gly), glutathione conjugates (such as maresin conjugate (13R)-S-glutathionyl-(14S)-hydroxy-(4Z,7Z,9E,11E,16Z,19Z)- docosahexaenoate, MCTR1) and other

gamma-glutamyl compounds (such as leukotriene C4, LTC4) (PubMed:<a href="http://www.uniprot.org/citations/17924658" target="\_blank">17924658</a>, PubMed:<a href="http://www.uniprot.org/citations/21447318" target="\_blank">21447318</a>, PubMed:<a href="http://www.uniprot.org/citations/27791009" target="\_blank">27791009</a>). The metabolism of glutathione by GGT1 releases free glutamate and the dipeptide cysteinyl-glycine, which is hydrolyzed to cysteine and glycine by dipeptidases (PubMed:<a href="http://www.uniprot.org/citations/27791009" target="\_blank">27791009</a>). 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 (PubMed:<a href="http://www.uniprot.org/citations/17924658" target="\_blank">17924658</a>, PubMed:<a href="http://www.uniprot.org/citations/21447318" target="\_blank">21447318</a>, PubMed:<a href="http://www.uniprot.org/citations/7673200" target="\_blank">7673200</a>, PubMed:<a href="http://www.uniprot.org/citations/7759490" target="\_blank">7759490</a>, PubMed:<a href="http://www.uniprot.org/citations/8095045" target="\_blank">8095045</a>, PubMed:<a href="http://www.uniprot.org/citations/8827453" target="\_blank">8827453</a>). Contributes to cysteine homeostasis, glutathione homeostasis and in the conversion of the leukotriene LTC4 to LTD4.

#### Cellular Location

Cell membrane; Single-pass type II membrane protein {ECO:0000250|UniProtKB:P07314}

#### Tissue Location

Detected in fetal and adult kidney and liver, adult pancreas, stomach, intestine, placenta and lung. There are several other tissue-specific forms that arise from alternative promoter usage but that produce the same protein

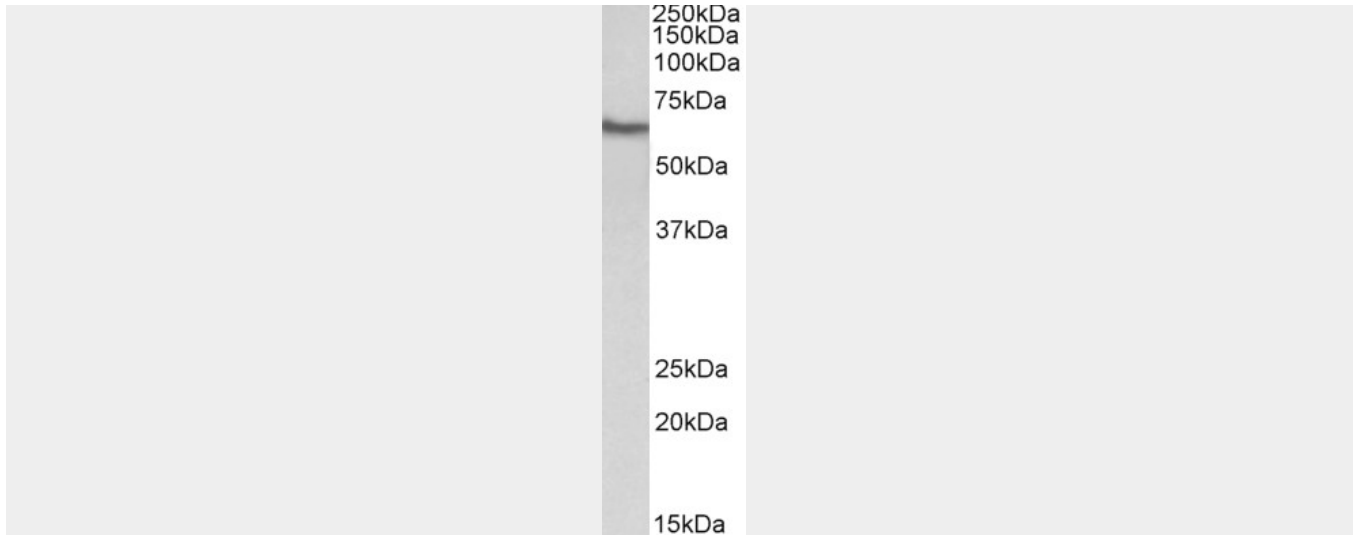
#### GGT1 Antibody (internal region, near N-Term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### GGT1 Antibody (internal region, near N-Term) - Images





AF3949a (0.3  $\mu\text{g/ml}$ ) staining of Human Kidney lysate (35  $\mu\text{g}$  protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

#### **GGT1 Antibody (internal region, near N-Term) - Background**

Reported variants represent identical protein: NP\_038347.2, NP\_001027536.1, NP\_001027537.1, NP\_005256.2.

#### **GGT1 Antibody (internal region, near N-Term) - References**

Autocatalytic cleavage of human gamma-glutamyl transpeptidase is highly dependent on N-glycosylation at asparagine 95. West MB, Wickham S, Quinalty LM, Pavlovicz RE, Li C, Hanigan MH. J Biol Chem. 2011 Aug 19;286(33):28876-88. PMID: 21712391