

GGT1 (aa180-193) Antibody (internal region)
Peptide-affinity purified goat antibody
Catalog # AF3950a

Specification

GGT1 (aa180-193) Antibody (internal region) - Product Information

Application	WB
Primary Accession	P19440
Other Accession	NP_005256.2 , 2678
Reactivity	Human
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	61410

GGT1 (aa180-193) Antibody (internal region) - 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 (aa180-193) Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

GGT1 (aa180-193) Antibody (internal region) - 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:17924658, PubMed:21447318, PubMed:27791009). The metabolism of glutathione by GGT1 releases free glutamate and the dipeptide cysteinyl-glycine, which is hydrolyzed to cysteine and glycine by dipeptidases (PubMed:27791009). 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:17924658, PubMed:21447318, PubMed:7673200, PubMed:7759490, PubMed:8095045, PubMed:8827453). 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

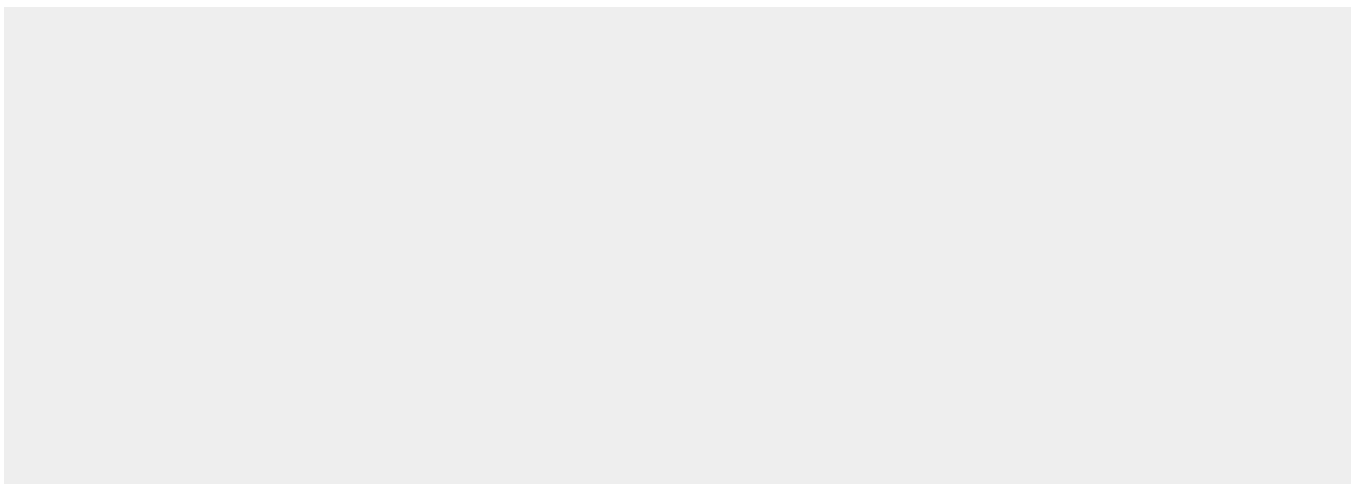
Detected in fetal and adult kidney and liver, adult pancreas, stomach, intestine, placenta and lung. There are several other tissue-specific forms that arise from alternative promoter usage but that produce the same protein

GGT1 (aa180-193) Antibody (internal region) - 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 (aa180-193) Antibody (internal region) - Images





AF3950a (0.1 $\mu\text{g/ml}$) staining of Human Kidney lysate (35 μg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

GGT1 (aa180-193) Antibody (internal region) - Background

Reported variants represent identical protein: NP_038347.2, NP_001027536.1, NP_001027537.1, NP_005256.2.

GGT1 (aa180-193) Antibody (internal region) - 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