

Ggt1 Antibody(N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19641a**Specification**

Ggt1 Antibody(N-term) - Product Information

Application	WB,E
Primary Accession	Q60928
Other Accession	P07314
Reactivity	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	12-39

Ggt1 Antibody(N-term) - Additional Information**Gene ID** 14598**Other Names**

Gamma-glutamyltranspeptidase 1, GGT 1, Gamma-glutamyltransferase 1, Glutathione hydrolase 1, Leukotriene-C4 hydrolase, CD224, Gamma-glutamyltranspeptidase 1 heavy chain, Gamma-glutamyltranspeptidase 1 light chain, Ggt1, Ggt

Target/Specificity

This Ggt1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 12-39 amino acids from the N-terminal region of rat Ggt1.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

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

Precautions

Ggt1 Antibody(N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Ggt1 Antibody(N-term) - Protein Information**Name** Ggt1

Synonyms Ggt, Ggtp

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). The metabolism of glutathione by GGT1 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. Contributes to cysteine homeostasis, glutathione homeostasis and in the conversion of the leukotriene LTC4 to LTD4 (By similarity). Indirectly regulates multiple aspects of skeletal biology (PubMed:[12810527](#)).

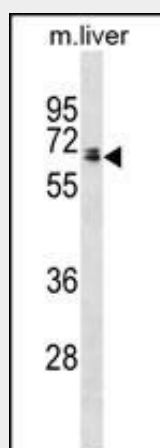
Cellular Location

Cell membrane {ECO:0000250|UniProtKB:P19440}; Single-pass type II membrane protein {ECO:0000250|UniProtKB:P07314}

Ggt1 Antibody(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(N-term) - Images

Ggt1 Antibody (N-term) (Cat. #AP19641a) western blot analysis in mouse liver tissue lysates (35ug/lane). This demonstrates the Ggt1 antibody detected the mouse Ggt1 protein (arrow).

Ggt1 Antibody(N-term) - Background

Initiates 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. Catalyzes the transfer of the glutamyl moiety of glutathione to amino acids and dipeptide

acceptors. Alternatively, glutathione can be hydrolyzed to give Cys-Gly and gamma glutamate.

Ggt1 Antibody(N-term) - References

Aly, H.A., et al. Chem. Biol. Interact. 182 (2-3), 112-118 (2009) :
Zheng, M.Q., et al. Am. J. Physiol., Cell Physiol. 297 (2), C253-C262 (2009) :
Hamden, K., et al. Steroids 73(5):495-501(2008)
Pandur, S., et al. Free Radic. Res. 41(12):1376-1384(2007)
Hamden, K., et al. J. Physiol. Biochem. 63(3):195-201(2007)