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Rat Ggt1 Antibody(N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19641a

Specification

Rat Ggt1 Antibody(N-term) - Product Information

Application	**WB,E**
Primary Accession	P07314
Other Accession	NP_446292.2
Reactivity	**Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**61610**
Antigen Region	**12-39**

Rat Ggt1 Antibody(N-term) - Additional Information

Gene ID 116568

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 Rat 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

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

Rat Ggt1 Antibody(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:6122208) (By similarity). The metabolism of glutathione by GGT1 releases free glutamate and the dipeptide cysteinyl-glycine, which is hydrolyzed to cysteine and glycine by dipeptidases (PubMed:6122208). 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:6122208). Contributes to cysteine homeostasis, glutathione homeostasis and in the conversion of the leukotriene LTC4 to LTD4 (PubMed:6122208).

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

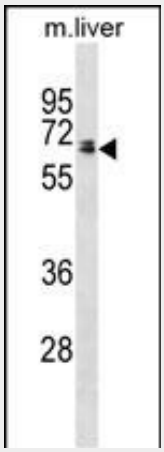
Tissue Location
Detected in adult kidney and mammary gland, and in fetal liver.

Rat 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 Cytomety
- Cell Culture

Rat Ggt1 Antibody(N-term) - Images



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

Rat Ggt1 Antibody(N-term) - Background

Initiates extracellular glutathione (GSH) breakdown, provides cells with a local cysteine supply and contributes to maintain intracelular 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.

Rat 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)