

Rat Ggt1 Antibody(N-term) Blocking peptide
Synthetic peptide
Catalog # BP19641a**Specification**

Rat Ggt1 Antibody(N-term) Blocking peptide - Product InformationPrimary Accession [P07314](#)**Rat Ggt1 Antibody(N-term) Blocking peptide - 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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Rat Ggt1 Antibody(N-term) Blocking peptide - 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) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

Rat Ggt1 Antibody(N-term) Blocking peptide - Images**Rat Ggt1 Antibody(N-term) Blocking peptide - 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.

Rat Ggt1 Antibody(N-term) Blocking peptide - 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)