GGT1 Antibody – Goat Polyclonal

PRODUCT OVERVIEW

Product Name	GGT1, Polyclonal Antibody
Full Product Name	Goat anti-GGT1 Antibody
Product Gene Name	anti-GGT1 antibody
Product Synonym Names	Goat Anti-GGT1 (aa180-193) Antibody; GGT1; gamma-glutamyltransferase 1; CD224; D22S672; D22S732; GGT; GGT 1; GTG; gamma-glutamyl transpeptidase; gamma-glutamyltranspeptidase 1; glutamyl transpeptidase; glutathione hydrolase 1; GGT1 antibody; gamma-glutamyltransferase 1 antibody; CD224 antibody; D22S672 antibody; D22S732 antibody; GGT antibody; GGT 1 antibody; GTG antibody; gamma-glutamyl transpeptidase antibody; gamma-glutamyltranspeptidase 1 antibody; glutamyl transpeptidase antibody; glutathione hydrolase 1 antibody
Immunogen Sequence	PSASKEPDNH VYTR
Clonality	Polyclonal
Host	Goat
Species Reactivity	Tested: Human; Expected from sequence similarity: Human
Form/Format	Supplied at 0.5 mg/ml in Tris saline, 0. 02% sodium azide, pH7.3 with 0.5% bovine serum albumin.
Purity/Purification	Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.
Concentration	100ug specific antibody in 200ul (lot specific)
Preparation and Storage	Aliquot and store at -20 degree C. Minimize freezing and thawing.
Antibody/Peptide Pairs	GGT1 peptide (MBS428394) is used for blocking the activity of GGT1 antibody (MBS423044)
Molecular Weight	24,080 Da
OMIM	231950
Immunogen	Peptide with sequence C-PSASKEPDNHVYTR, from the internal region (near N terminus) of the protein sequence according to NP_005256.2.
Epitope	Internal region (near N Terminus)
Note	Reported variants represent identical protein: NP_038347.2, NP_001027536.1, NP_001027537.1, NP_005256.2.
ISO Certification	Manufactured in an ISO 9001:2008 Certified Laboratory.
Applications Tested/Suitable for anti-GGT1 antibody	Peptide ELISA (EIA), Western Blot (WB)
Application Notes for anti-GGT1 antibody	Peptide ELISA: Antibody detection limit dilution 1: 128000. Western Blot: Approx 60kDa band observed in Human Kidney lysates (calculated MW of 61.4kDa according to NP_005256.2). Recommended concentration: 0.3-1ug/ml.
Related Product Information for anti-GGT1 antibody	MBS423044 is an antibody targeting GGT1. Also known as Goat anti-GGT1 Antibody. Reactive in Tested: Human; Expected from sequence similarity: Human. Host: Goat.
Other Notes	Small volumes of anti-GGT1 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.



Western Blot (WB) of anti-GGT1 antibody
(0.3ug/ml) staining of Human Kidney lysate (35ug protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for GGT1. It may not necessarily be applicable to this product.

NCBI GI #	73915090
NCBI GeneID	2678
NCBI Accession #	NP_005256.2
UniProt Secondary Accession #	Q08247; Q14404; Q8TBS1; Q9UMK1
UniProt Related Accession #	P19440
GenBank Nucleotide #	NM_005265.3
NCBI Official Synonym Full Names	gamma-glutamyltransferase 1
NCBI Official Symbol	GGT1
NCBI Official Synonym Symbols	GGT; GTG; CD224; GGT 1; D22S672; D22S732
UniProt Protein Name	Gamma-glutamyltranspeptidase 1
UniProt Synonym Protein Names	Gamma-glutamyltransferase 1; Glutathione hydrolase 1 (EC:3.4.19.13
Protein Family	Gamma-glutamyltranspeptidase
UniProt Gene Name	GGT1
UniProt Synonym Gene Names	GGT; GGT 1
UniProt Entry Name	GGT1_HUMAN
NCBI Protein Information	gamma-glutamyltranspeptidase 1
NCBI Summary for GGT1	The enzyme encoded by this gene is a type I gamma-glutamyltransferase that catalyzes the transfer of the glutamyl moiety of glutathione to a variety of amino acids and dipeptide acceptors. The enzyme is composed of a heavy chain and a light chain, which are derived from a single precursor protein. It is expressed in tissues involved in absorption and secretion and may contribute to the etiology of diabetes and other metabolic disorders. Multiple alternatively spliced variants have been identified. There are a number of related genes present on chromosomes 20 and 22, and putative pseudogenes for this gene on chromosomes 2, 13, and 22. [provided by RefSeq, Jan 2014]

UniProt Comments for GGT1	GGT1: 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. Isoform 3 seems to be inactive. Defects in GGT1 are a cause of glutathionuria (GLUTH); also known as gamma-glutamyltranspeptidase deficiency. It is an autosomal recessive disease. Belongs to the gamma-glutamyltransferase family. 3 isoforms of the human protein are produced by alternative promoter. Protein type: Other Amino Acids Metabolism - taurine and hypotaurine; Other Amino Acids Metabolism - glutathione; Other Amino Acids Metabolism - selenoamino acid; Transferase; EC 3.4.19.14; Other Amino Acids Metabolism - cyanoamino acid; EC 2.3.2.2; EC 3.4.19.13; Lipid Metabolism - arachidonic acid; Membrane protein, integral Chromosomal Location of Human Ortholog: 22q11.23 Cellular Component: anchored to external side of plasma membrane; extracellular space; integral to membrane; plasma membrane Molecular Function: gamma-glutamyltransferase activity; protein binding Biological Process: amino acid metabolic process; cysteine biosynthetic process; glutamate metabolic process; glutathione biosynthetic process; glutathione catabolic process; glutathione metabolic process; leukotriene biosynthetic process; leukotriene metabolic process; regulation of immune system process; regulation of inflammatory response; spermatogenesis; xenobiotic metabolic process; zymogen activation Disease: Glutathionuria
Research Articles on GGT1	**1.** serum GGT and LDH together with higher BCLC staging should be potential predictive factors for HCC overall survival.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
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