

Anti-GGT5 HC Antibody

Catalog # AP53815

Product Information

Application	WB
Primary Accession	P36269
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	62261

Additional Information

Gene ID	2687
Other Names	GGTLA1; Gamma-glutamyltransferase 5; GGT 5; Gamma-glutamyl transpeptidase-related enzyme; GGT-rel; Gamma-glutamyltransferase-like activity 1; Gamma-glutamyltranspeptidase 5; Glutathione hydrolase 5; Leukotriene-C4 hydrolase
Target/Specificity	Recognizes endogenous levels of GGT5 HC protein.
Dilution	WB~~1/500 - 1/1000
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	GGT5
Synonyms	GGTLA1
Function	Cleaves the gamma-glutamyl bond of extracellular glutathione tripeptide (gamma-Glu-Cys-Gly) and certain glutathione conjugates (PubMed: 1676842 , PubMed: 21447318). Hydrolyzes glutathione releasing L- Glu and Cys-Gly dipeptide which is further metabolized to maintain extracellular cysteine levels but also to provide cysteine necessary for intracellular glutathione synthesis (PubMed: 1676842 , PubMed: 21447318). Among glutathione-S-conjugates metabolizes leukotriene C4 (LTC4) and S-geranylgeranyl-glutathione (GGG), but is inactive toward gamma-glutamyl leucine. Converts extracellular LTC4 to LTD4 during acute inflammatory response. Acts as a negative regulator of GGG bioactivity. GGT5 (via GGG catabolism) and ABCC1 (via extracellular transport) establish GGG gradients within lymphoid tissues to position P2RY8-positive lymphocytes at germinal

centers in lymphoid follicles and restrict their chemotactic transmigration from blood vessels to bone marrow parenchyma (By similarity). The transpeptidation reaction, i.e. the transfer of gamma-glutamyl moiety to an acceptor molecule to yield a new gamma-glutamyl compound requires high concentration of dipeptide acceptor and is considered nonphysiological (PubMed:[21447318](#), PubMed:[29667297](#)).

Cellular Location

Membrane {ECO:0000250|UniProtKB:Q9Z2A9}; Single- pass type II membrane protein {ECO:0000250|UniProtKB:Q9Z2A9}

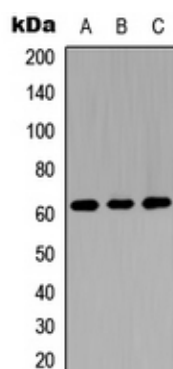
Tissue Location

Expressed in follicular dendritic cells in lymphoid follicles (at protein level).

Background

Rabbit polyclonal antibody to GGT5 HC

Images



Western blot analysis of GGT5 HC expression in A549 (A), NS-1 (B), H9C2 (C) whole cell lysates.

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