

**Anti-GGT5 HC Antibody**  
Catalog # AP53815**Specification****Anti-GGT5 HC Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P36269</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	62261

**Anti-GGT5 HC Antibody - 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

**Anti-GGT5 HC Antibody - 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](http://www.uniprot.org/citations/1676842) target="\_blank">1676842</a>, PubMed: [21447318](http://www.uniprot.org/citations/21447318) target="\_blank">21447318</a>). 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](http://www.uniprot.org/citations/1676842) target="\_blank">1676842</a>, PubMed: [1676842](http://www.uniprot.org/citations/1676842) target="\_blank">1676842</a>, PubMed: [1676842](http://www.uniprot.org/citations/1676842) target="\_blank">1676842</a>).

[21447318](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/21447318), PubMed:[29667297](http://www.uniprot.org/citations/29667297)).

#### Cellular Location

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

#### Tissue Location

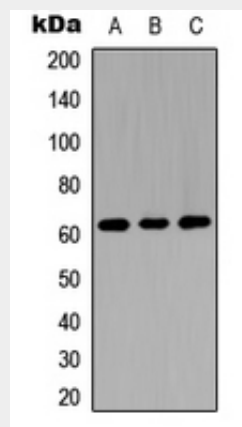
Expressed in follicular dendritic cells in lymphoid follicles (at protein level).

### Anti-GGT5 HC Antibody - 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](#)

### Anti-GGT5 HC Antibody - Images



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

### Anti-GGT5 HC Antibody - Background

Rabbit polyclonal antibody to GGT5 HC