

**LYPLA3 Antibody (C-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP11706b****Specification**

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**LYPLA3 Antibody (C-term) Blocking peptide - Product Information**Primary Accession [Q8NCCC](#)**LYPLA3 Antibody (C-term) Blocking peptide - Additional Information**

Gene ID 23659

**Other Names**

Group XV phospholipase A2, 231-, 1-O-acylceramide synthase, ACS, LCAT-like lysophospholipase, LLPL, Lysophospholipase 3, Lysosomal phospholipase A2, LPLA2, PLA2G15, LYPLA3

**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.

**LYPLA3 Antibody (C-term) Blocking peptide - Protein Information**Name PLA2G15 ([HGNC:17163](#))**Synonyms** LYPLA3**Function**

Has dual calcium-independent phospholipase and O- acyltransferase activities with a potential role in glycerophospholipid homeostasis and remodeling of acyl groups of lipophilic alcohols present in acidic cellular compartments (PubMed: [10092508](http://www.uniprot.org/citations/10092508), PubMed: [11790796](http://www.uniprot.org/citations/11790796), PubMed: [20410020](http://www.uniprot.org/citations/20410020), PubMed: [23958596](http://www.uniprot.org/citations/23958596), PubMed: [29724779](http://www.uniprot.org/citations/29724779), PubMed: [25727495](http://www.uniprot.org/citations/25727495)). Catalyzes hydrolysis of the ester bond of the fatty acyl group attached at sn-1 or sn-2 position of phospholipids (phospholipase A1 or A2 activity) and transfer it to the hydroxyl group at the first carbon of lipophilic alcohols (O-acyltransferase activity) (PubMed: [10092508](http://www.uniprot.org/citations/10092508), PubMed: [11790796](http://www.uniprot.org/citations/11790796), PubMed: [20410020](http://www.uniprot.org/citations/20410020), PubMed: [23958596](http://www.uniprot.org/citations/23958596)).

PubMed:<a href="http://www.uniprot.org/citations/29724779" target="\_blank">29724779</a>, PubMed:<a href="http://www.uniprot.org/citations/25727495" target="\_blank">25727495</a>). Among preferred fatty acyl donors are phosphatidylcholines, phosphatidylethanolamines, phosphatidylglycerols and phosphatidylserines (PubMed:<a href="http://www.uniprot.org/citations/29724779" target="\_blank">29724779</a>). Favors sn-2 over sn-1 deacylation of unsaturated fatty acyl groups of phosphatidylcholines and phosphatidylethanolamines (By similarity). Among preferred fatty acyl acceptors are natural lipophilic alcohols including short-chain ceramide N-acetyl-sphingosine (C2 ceramide), alkylacylglycerols, monoacylglycerols, and acylethanolamides such as anandamide and oleoylethanolamide (PubMed:<a href="http://www.uniprot.org/citations/29724779" target="\_blank">29724779</a>). Selectively hydrolyzes the sn-1 fatty acyl group of truncated oxidized phospholipids and may play a role in detoxification of reactive oxidized phospholipids during oxidative stress (PubMed:<a href="http://www.uniprot.org/citations/30830753" target="\_blank">30830753</a>). Required for normal phospholipid degradation in alveolar macrophages with potential implications in pulmonary surfactant clearance (By similarity). At neutral pH, hydrolyzes the sn-1 fatty acyl group of the lysophosphatidylcholines (PubMed:<a href="http://www.uniprot.org/citations/10092508" target="\_blank">10092508</a>).

#### **Cellular Location**

Lysosome. Secreted. Membrane; Peripheral membrane protein

#### **Tissue Location**

Detected in blood plasma (at protein level) (PubMed:10092508, PubMed:20410020). Ubiquitous. Highly expressed in heart, placenta, skeletal muscle, kidney and pancreas. Detected at lower levels in spleen, thymus, prostate, testis, ovary, small intestine, colon and peripheral blood leukocytes (PubMed:10092508)

#### **LYPLA3 Antibody (C-term) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

#### **LYPLA3 Antibody (C-term) Blocking peptide - Images**

#### **LYPLA3 Antibody (C-term) Blocking peptide - Background**

The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP contains an extracellular domain, a single transmembrane segment and two tandem intracytoplasmic catalytic domains, and thus belongs to receptor type PTP. This gene is specifically expressed in hematopoietic cells. This PTP has been shown to be an essential regulator of T- and B-cell antigen receptor signaling. It functions through either direct interaction with components of the antigen receptor complexes, or by activating various Src family kinases required for the antigen receptor signaling. This PTP also suppresses JAK kinases, and thus functions as a regulator of cytokine receptor signaling. Four alternatively spliced transcripts variants of this gene, which encode distinct isoforms, have been reported. [provided by RefSeq].

#### **LYPLA3 Antibody (C-term) Blocking peptide - References**

Heyd, F., et al. Mol. Cell 40(1):126-137(2010) Wu, Z., et al. J. Immunol. 185(1):231-238(2010) Cui, J., et al. Arthritis Rheum. 62(7):1849-1861(2010) Booth, N.J., et al. J. Immunol. 184(8):4317-4326(2010) Capitanescu, B., et al. Rom J Morphol Embryol 51(1):49-54(2010)