

ATGL Blocking Peptide
Catalog # PBV10364b**Specification**

ATGL Blocking Peptide - Product Information

Primary Accession	Q96AD5
Other Accession	AAW81962
Gene ID	57104
Calculated MW	55316

ATGL Blocking Peptide - Additional Information**Gene ID** 57104**Application & Usage**

The peptide is used for blocking the antibody activity of ATGL. It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for 30-60 minutes at 37°C.

Other Names

Patatin-like phospholipase domain-containing protein 2, 3.1.1.3, Adipose triglyceride lipase, Calcium-independent phospholipase A2, Desnutrin, IPLA2-zeta, Pigment epithelium-derived factor, TTS2.2, Transport-secretion protein 2, TTS2, PNPLA2, ATGL

Target/Specificity

ATGL

Formulation

50 µg (0.5 mg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA and 0.02% thimerosal.

Reconstitution & Storage

-20 °C

Background Descriptions**Precautions**

ATGL Blocking Peptide is for research use only and not for use in diagnostic or therapeutic procedures.

ATGL Blocking Peptide - Protein Information**Name** PNPLA2 ([HGNC:30802](#))**Function**

Catalyzes the initial step in triglyceride hydrolysis in adipocyte and non-adipocyte lipid droplets

(PubMed:15550674, PubMed:15364929, PubMed:16150821, PubMed:17603008, PubMed:16239926, PubMed:34903883). Exhibits a strong preference for the hydrolysis of long-chain fatty acid esters at the sn-2 position of the glycerol backbone and acts coordinately with LIPE/HLS and DGAT2 within the lipolytic cascade (By similarity). Also possesses acylglycerol transacylase and phospholipase A2 activities (PubMed:15364929, PubMed:17032652, PubMed:17603008). Transfers fatty acid from triglyceride to retinol, hydrolyzes retinylesters, and generates 1,3-diacylglycerol from triglycerides (PubMed:17603008). Regulates adiposome size and may be involved in the degradation of adiposomes (PubMed:16239926). May play an important role in energy homeostasis (By similarity). May play a role in the response of the organism to starvation, enhancing hydrolysis of triglycerides and providing free fatty acids to other tissues to be oxidized in situations of energy depletion (By similarity). Catalyzes the formation of an ester bond between hydroxy fatty acids and fatty acids derived from triglycerides or diglycerides to generate fatty acid esters of hydroxy fatty acids (FAHFAs) in adipocytes (PubMed:35676490).

Cellular Location

Lipid droplet. Cell membrane; Multi-pass membrane protein. Cytoplasm {ECO:0000250|UniProtKB:Q8BJ56}

Tissue Location

Highest expression in adipose tissue. Also detected in heart, skeletal muscle, and portions of the gastrointestinal tract Detected in normal retina and retinoblastoma cells. Detected in retinal pigment epithelium and, at lower intensity, in the inner segments of photoreceptors and in the ganglion cell layer of the neural retina (at protein level).

ATGL Blocking Peptide - 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](#)

ATGL Blocking Peptide - Images