

PRODUCT INFORMATION



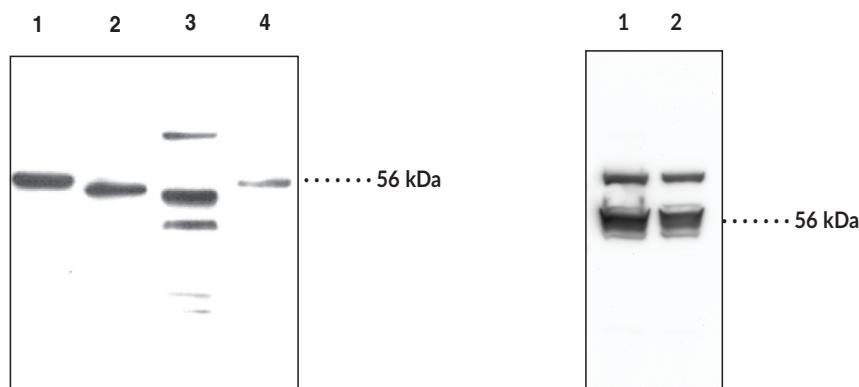
Adipose Triglyceride Lipase Polyclonal Antibody

Item No. 10006409

Overview and Properties

Contents:	This vial contains 500 µl of peptide affinity-purified polyclonal antibody.
Synonyms:	ATGL, Calcium-independent Phospholipase A2, Desnutrin, IPLA2-ζ, Patatin-like Phospholipase Domain-containing Protein 2, Phospholipase A2ζ, Pigment Epithelium-derived Factor, PNPLA2, TTS2.2
Immunogen:	Synthetic peptide from an internal region of human ATGL
Species Reactivity:	(+) Human, mouse, and rat; other species not tested
Uniprot No.:	Q96AD5
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥3 years
Storage Buffer:	PBS, pH 7.2, with 50% glycerol and 0.02% sodium azide
Host:	Rabbit
Applications:	Immunohistochemistry (IHC) (paraffin-embedded tissue) and Western blot (WB); the recommended starting dilution for IHC (paraffin-embedded tissue) is 1:65 and 1:200 for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Images



Lane 1: Human Liver Microsome (50 µg)
Lane 2: HepG2 Cell Lysate (50 µg)
Lane 3: Rat Brown Fat Homogenate (50 µg)
Lane 4: Mouse Liver 100,000 x g Pellet (50 µg)

Lane 1: Mouse Heart (50 µg)
Lane 2: Mouse Heart (25 µg)

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/12/2023

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM

PRODUCT INFORMATION



Description

Triglycerides are the most efficient form of energy storage in mammalian adipose tissue during times of caloric excess. ATGL is one of the key enzymes involved in the mobilization of fatty acids from triglyceride stores in adipose tissue, catalyzing the conversion of triacylglycerols to diacylglycerols.¹ Inhibition of ATGL markedly decreases total adipose acyl-hydrolase activity, and thus may be a potential drug target for the diabetic pathology.¹ ATGL mRNA is detected in a wide range of tissues including adipose, lung, skeletal muscle, testis, heart, brain, and kidney, with adipose tissue expressing the highest level.² Human ATGL is 504 amino acids in length with an estimated molecular weight of 55.2 kDa. Cayman's ATGL Polyclonal Antibody detects the enzyme at 56 kDa by Western blot from tissues and cells such as brown fat, liver, mouse macrophages, and HepG2 cells.

References

1. Zimmermann, R., Strauss, J.G., Haemmerle, G., *et al.* Fat mobilization in adipose tissue is promoted by adipose triglyceride lipase. *Science* **306**(5700), 1383-1386 (2004).
2. Villena, J.A., Roy, S., Sarkadi-Nagy, E., *et al.* Desnutrin, an adipocyte gene encoding a novel patatin domain-containing protein, is induced by fasting and glucocorticoids. Ectopic expression of desnutrin increases triglyceride hydrolysis. *J. Biol. Chem.* **279**(45), 47066-47075 (2004).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM