Cat. #: 60B732

Description:

ATGL(adipose triglyceride lipase) may function as a lipase and play a role in the adaptive response to a low energy state, such as fasting, by providing fatty acids to other tissues for oxidation. In addition, decreased expression of desnutrin in obesity models suggests its possible contribution to the pathophysiology of obesity. The adipose triglyceride lipase (ATGL) catalyzes the initial step in triglyceride hydrolysis. ATGL contains a "patatin domain" common to plant acyl-hydrolases. ATGL is highly expressed in adipose tissue of mice and humans. It exhibits high substrate specificity for triacylglycerol and is associated with lipid droplets. Inhibition of ATGL markedly decreases total adipose acyl-hydrolase activity. Thus, ATGL and HSL coordinately catabolize stored triglycerides in adipose tissue of mammals.

The iPLA2epsilon (adiponutrin), iPLA2zeta (TTS-2.2), and iPLA2eta (GS2) are three novel TAG lipases/acylglycerol transacylases that likely participate in TAG hydrolysis and the acyl-CoA independent transacylation of acylglycerols

Immunogen/Specificity:

Polyclonal antibody produced in rabbits immunizing with a synthetic peptide corresponding to C-terminal residues of human ATGL(adipose triglyceride lipase)

References

Zimmermann,R., et al, Science 306 (5700), 1383-1386 (2004) Jenkins,C.M., et al, J. Biol. Chem. 279 (47), 48968-48975 (2004)

Villena,J.A., et al, J. Biol. Chem. 279 (45), 47066-47075 (2004) Wilson,P.A., et al, (er) J. Lipid Res. (2006) In press Schoenborn,V., et al, Diabetes 55 (5), 1270-1275 (2006) Smirnova,E., et al, EMBO Rep. 7 (1), 106-113 (2006) Species: human, mouse, rat Storage and Stability: at -20oC

Storage buffer:

This antibody is stored in PBS, 0.01% sodium azide and 50% glycerol.

Preparation:

Purified by antigen-specific affinity chromatography.

Applications : ELISA Western Blotting (1µg/ml for 2hrs)