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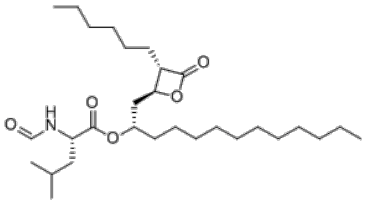
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	Orlistat
Cat. No.	:	PC-20125
CAS No.	:	96829-58-2
Molecular Formula	:	$C_{29}H_{53}NO_5$
Molecular Weight	:	495.75
Target	:	Diacylglycerol Lipase (DAGL)
Solubility	:	10 mM in DMSO



Biological Activity

Orlistat ((–)-Tetrahydrolipstatin, Ro-18-0647) is a small molecule inhibitor of pancreatic and gastric **lipase**, inhibits **DAGLα**, DAGLβ, ABHD12, ABHD16A, and platelet-activating factor acetylhydrolase (PAF-AH) with IC50 of 0.06, 0.1, 0.08, 0.03, and 0.05 μM, respectively.
Orlistat does not inhibit fatty acid amide hydrolase (FAAH) with IC50 of >100 uM.
Orlistat (1 uM) decreases ionomycin-induced production of the endocannabinoid 2-arachidonoyl glycerol (2-AG) in N18TG2 murine neuroblastoma cells.
Orlistat also inhibits fatty acid synthase (**FASN**; apparent Ki =0.1 μM)) and inhibits the proliferation of PC3 prostate cancer cells in a concentration-dependent manner.
Orlistat (10 mg/kg) decreases serum cholesterol levels and total body weight in a mouse model of obesity induced by a high-fat diet.

References

Bisogno, T.et al. ***J. Cell Biol.*** 163(3), 463-468 (2003).

Hoover, H.S.et al. ***Bioorg. Med. Chem. Lett.*** 18(22), 5838-5841 (2008).

Bisogno, T.,et al. ***Biochim. Biophys. Acta*** 1761(2), 205-212 (2006).

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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