

## **Data Sheet**

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 Product Name
 : Orlistat

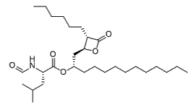
 Cat. No.
 : PC-20125

 CAS No.
 : 96829-58-2

 Molecular Formula
 : C29H53NO5

 Molecular Weight
 : 495.75

Target : Phospholipase Solubility : 10 mM in DMSO



## **Biological Activity**

Orlistat ((–)-Tetrahydrolipstatin, Ro-18-0647) is a small molecule inhibitor of pancreatic and gastric lipase, inhibits DAGL $\alpha$ , DAGL $\beta$ , ABHD12, ABHD16A, and platelet-activating factor acetylhydrolase (PAF-AH) with IC50 of 0.06, 0.1, 0.08, 0.03, and 0.05  $\mu$ M, 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.

also inhibits fatty acid synthase (FASN; apparent Ki =0.1  $\mu$ M)) 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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