

#### PRODUCT DATA SHEET

Code No.: BIA-T1320

Pack sizes.: 25mg, 100mg

# Tetrahydrolipstatin

Synonyms:

Orlipastat, Orlistat

## **Specifications**

CAS # : 96829-58-2
Molecular Formula : C29H53NO5

Molecular Weight : 495.7

Source :-

Appearance : White solid
Purity : >98% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

# **Application Notes**

Tetrahydrolipstatin (orlistat) is a semi-synthetic derivative of lipstatin, a metabolite isolated from Streptomyces toxytricini. Tetrahydrolipstatin acts as a potent, irreversible inhibitor of pancreatic lipase. In vivo, it blocks the absorption of triglycerides while allowing fatty acid absorption. Tetrahydrolipstatin is widely used for the treatment of obesity.

### References

- 1. Lipstatin, an inhibitor of pancreatic lipase, produced by Streptomyces toxytricini. I. Producing organism, fermentation, isolation and biological activity. Weibel E. et al., J. Antibiot. 1987, 40, 1081.
- 2. Syntheses of tetrahydrolipstatin and absolute configuration of tetrahydrolipstatin and lipstatin. Barbier P. et al., Helv. Chim. Acta 1987, 70, 196.
- 3. The total synthesis of (-)-tetrahydrolipstatin. Bodkin J. et al., Aust. J. Chem 2003, 56, 795.