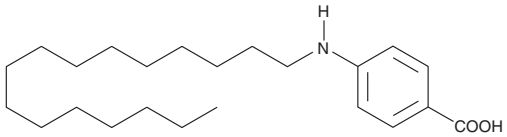
PRODUCT INFORMATION

Cetaben

Item No. 10007171

CAS Registry No.:	55986-43-1
Formal Name:	4-(hexadecylamino)-benzoic acid
Synonym:	Hexadecylamino-*p*-amino Benzoic Acid
MF:	$C_{23}H_{39}NO_2$
FW:	361.6
Purity:	≥98%
UV/Vis.:	λ_{max}: 224, 304 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Cetaben is supplied as a crystalline solid. A stock solution may be made by dissolving the cetaben in the solvent of choice, which should be purged with an inert gas. Cetaben is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of cetaben in ethanol is approximately 1 mg/ml and approximately 20 mg/ml in DMSO and DMF.

Cetaben is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, cetaben should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Cetaben has a solubility of approximately 0.15 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

The fibrate class of hypolipidemic drugs such as clofibrate and fenofibrate elicit their effects by binding to and activating peroxisome proliferator-activated receptor α (PPARα). Cetaben is a unique, peroxisome proliferator-activated receptor α (PPARα)-independent peroxisome proliferator with hypolipidemic activity, characterized by reduction in serum triglyceride and cholesterol concentrations in rats.[1] In male wistar rats, cetaben increased the activity of all peroxisomal enzymes examined in liver and kidney, whereas clofibrate showed a varied regulatory pattern.[2] In addition to its effects on peroxisomes, cetaben inhibits cholesterol synthesis in the human hepatoma HepG2 cells resulting in reversible changes in Golgi morphology.[3,4] It also blocked triglyceride synthesis by 99% and reduced cholesterol ester synthesis by >70% at a concentration of 50 µM in these same cells.[4]

References

1. Chandoga, J., Hampl, L., Turecky, L., *et al.* Cetaben is an exceptional type of peroxisome proliferator. *Int. J. Biochem.* **26(5)**, 679-696 (1994).
2. Chandoga, J., Rojeková, I., Hampl, L., *et al.* Cetaben and fibrates both influence the activities of peroxisomal enzymes in different ways. *Biochem. Pharmacol.* **47(3)**, 515-519 (1994).
3. Kovacs, W., Walter, I., and Stangl, H. Cetaben-induced changes on the morphology and peroxisomal enzymes in MH1C1 rat hepatoma and HepG2 human hepatoblastoma cells. *Histochem. Cell Biol.* **115(6)**, 509-519 (2001).
4. Kovacs, W., Schrader, M., Walter, I., *et al.* The hypolipidemic compound cetaben induces changes in Golgi morphology and vesicle movement. *Histochem. Cell Biol.* **122(2)**, 95-109 (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