Cetaben
Item No. 10007171

CAS Registry No.: 55986-43-1
Formal Name: 4-(hexadecylamino)-benzoic acid
Synonym: Hexadecylamino-α-amino Benzoic Acid
MF: C₂₃H₃₉NO₂
FW: 361.6
Purity: >98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ max: 224, 304 nm

Laboratory Procedures

For long term storage, we suggest that cetaben be stored as supplied at -20°C. It should be stable for at least two years.

Cetaben is supplied as a crystalline solid. A stock solution may be made by dissolving the cetaben in an organic solvent 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 1 mg/ml and 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 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.

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, PPARα-independent peroxisome proliferator with hypolipidemic activity, characterized by reduction in serum triglyceride and cholesterol concentrations in rats. In male wistar rats, cetaben increased the activity of all peroxisomal enzymes examined in liver and kidney, whereas clofibrate showed a varied regulatory pattern. In addition to its effects on peroxisomes, cetaben inhibits cholesterol synthesis in the human hepatoma HepG2 cells resulting in reversible changes in Golgi morphology. It also blocked triglyceride synthesis by 99% and reduced cholesterol ester synthesis by >70% at a concentration of 50 µM in these same cells.

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/10007171

WARNING: This product is for laboratory research only; not for administration to humans. Not for human or veterinary diagnostic or therapeutic use.

MATERIAL SAFETY DATA
This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your instrument.

WARRANTY AND LIMITATION OF REMEDY
Cayman Chemical Company makes no warranty or guarantee of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman warrants only to the original customer that the material will meet our specifications in the time of delivery.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have any obligation or liability, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees. Buyer’s exclusive remedy and Cayman’s sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman’s option, the replacement, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our Warranty and Limitation of Remedy located on our website and in our catalog.