

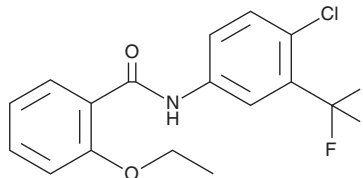
PRODUCT INFORMATION



CTB

Item No. 37480

CAS Registry No.: 451491-47-7
Formal Name: N-[4-chloro-3-(trifluoromethyl)phenyl]-2-ethoxy-benzamide
MF: C₁₆H₁₃ClF₃NO₂
FW: 343.7
Purity: ≥98%
Supplied as: A 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

CTB is supplied as a solid. A stock solution may be made by dissolving the CTB in the solvent of choice, which should be purged with an inert gas. CTB is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of CTB in ethanol is approximately 10 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of CTB can be prepared by directly dissolving the solid in aqueous buffers. CTB is slightly soluble in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

CTB is an activator of the histone acetyltransferase p300.¹ It induces acetylation of core histones in HeLa cells when used at a concentration of 200 μM. CTB (85.43 μM) increases p53 acetylation and induces apoptosis in MCF-7 cells.²

References

1. Mantelingu, K., Kishore, A.H., Balasubramanyam, K., *et al.* Activation of p300 histone acetyltransferase by small molecules altering enzyme structure: Probed by surface-enhanced Raman spectroscopy. *J. Phys. Chem. B* **111(17)**, 4527-4534 (2007).
2. Dastjerdi, M.N., Salahshoor, M.R., Mardani, M., *et al.* The effect of CTB on P53 protein acetylation and consequence apoptosis on MCF-7 and MRC-5 cell lines. *Adv. Biomed. Res.* **2**, 24 (2013).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/26/2023

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