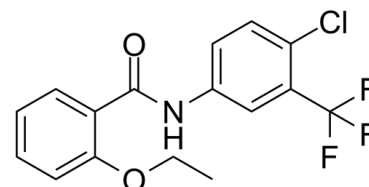


## Data Sheet

<b>Product Name:</b>	CTB
<b>Cat. No.:</b>	CS-0168081
<b>CAS No.:</b>	451491-47-7
<b>Molecular Formula:</b>	C <sub>16</sub> H <sub>13</sub> ClF <sub>3</sub> NO <sub>2</sub>
<b>Molecular Weight:</b>	343.73
<b>Target:</b>	Apoptosis; Histone Acetyltransferase
<b>Pathway:</b>	Apoptosis; Epigenetics
<b>Solubility:</b>	DMSO : 100 mg/mL (290.93 mM; Need ultrasonic)



### BIOLOGICAL ACTIVITY:

CTB is a potent **p300 histone acetyltransferase** activator<sup>[1]</sup>. CTB can effectively induce **apoptosis** in MCF-7 cells<sup>[2]</sup>. IC<sub>50</sub> & Target: p300 histone acetyltransferase **In Vitro**: CTB (10, 50, 100, 150, 200, and 250 μM; 10 min) enhances p300 HAT activity of p300 in a dosedependent manner<sup>[1]</sup>.

CTB (0-200 μM; 24 hours) inhibits the viability of MCF-7 cells with an IC<sub>50</sub> of 85.43 μM<sup>[2]</sup>.

CTB (85.43 μM; 24, 48 and 72 h) induces time dependence apoptosis of MCF-7 cells<sup>[2]</sup>.

CTB (50 uM; 24 h) increases p300/CBP activity , and reduces autophagic flux in primary neurons<sup>[3]</sup>.

### References:

[1]. Mantelingu K, et al. Activation of p300 histone acetyltransferase by small molecules altering enzyme structure: probed by surface-enhanced Raman spectroscopy. J Phys Chem B. 2007;111(17):4527-4534.

[2]. Chen X, et al. Promoting tau secretion and propagation by hyperactive p300/CBP via autophagy-lysosomal pathway in tauopathy. Mol Neurodegener. 2020;15(1):2. Published 2020 Jan 6.

[3]. Dastjerdi MN, et al. The effect of CTB on P53 protein acetylation and consequence apoptosis on MCF-7 and MRC-5 cell lines. Adv Biomed Res. 2013;2:24. Published 2013 Mar 6.

### CAIndexNames:

Benzamide, N-[4-chloro-3-(trifluoromethyl)phenyl]-2-ethoxy-

### SMILES:

O=C(NC1=CC=C(Cl)C(C(F)(F)F)=C1)C2=CC=CC=C2OCC

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 610-426-3128

Fax: 888-484-5008

E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA