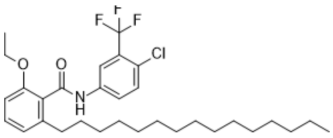
CTPB

Cat. No.:	HY-124960
CAS No.:	586976-24-1
Molecular Formula:	$C_{31}H_{43}ClF_3NO_2$
Molecular Weight:	554.13
Target:	Histone Acetyltransferase
Pathway:	Epigenetics
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 2 years -20°C 1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 62.5 mg/mL (112.79 mM; Need ultrasonic)

Preparing Stock Solutions

Concentration \ Solvent \ Mass	1 mg	5 mg	10 mg
1 mM	1.8046 mL	9.0232 mL	18.0463 mL
5 mM	0.3609 mL	1.8046 mL	3.6093 mL
10 mM	0.1805 mL	0.9023 mL	1.8046 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: 2.08 mg/mL (3.75 mM); Suspended solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (3.75 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (3.75 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

CTPB is a good activator of p300 histone acetyl transferase (HAT) enzyme[1].

IC_{50} & Target

CBP/p300

In Vitro

CTPB is a synthetic HAT activator, which promotes the transcription by increasing the H3 and H4 acetylation in nucleosome [1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Cells. 2020 Jun 10;9(6):1447.
- Oncotargets Ther. 2020 Dec 1;13:12383-12395.

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REFERENCES

[1]. Sivanandam M, et al. Investigation of activation mechanism and conformational stability of N-(4-chloro-3-trifluoromethyl-phenyl)-2-ethoxybenzamide and N-(4-chloro-3-trifluoromethyl-phenyl)-2-ethoxy-6-pentadecyl-benzamidein the active site of p300 histone acetyl transferase enzyme by molecular dynamics and binding free-energy studies. J Biomol Struct Dyn. 2018 Oct 9:1-38.

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