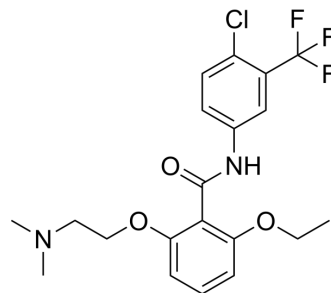


YF-2

Cat. No.:	HY-16531		
CAS No.:	1311423-89-8		
Molecular Formula:	C ₂₀ H ₂₂ ClF ₃ N ₂ O ₃		
Molecular Weight:	430.85		
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 : ≥ 125 mg/mL (290.12 mM)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.3210 mL	11.6050 mL	23.2099 mL
	5 mM	0.4642 mL	2.3210 mL	4.6420 mL
	10 mM	0.2321 mL	1.1605 mL	2.3210 mL

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.08 mg/mL (4.83 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: 2.08 mg/mL (4.83 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.08 mg/mL (4.83 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

YF-2 is a highly selective, blood-brain-barrier permeable histone acetyltransferase activator, acetylates H3 in the hippocampus, with EC₅₀s of 2.75 μM, 29.04 μM and 49.31 μM for CBP, PCAF, and GCN5, respectively, shows no effect on HDAC. Anti-cancer and anti-Alzheimer's disease^[1].

IC₅₀ & Target

GCN5/PCAF 29.04 μM (EC50)	GCN5 49.31 μM (EC50)	CBP 2.75 μM (EC50)
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In Vitro	YF-2 (0.03, 0.1, 0.25, 0.5, 1, 2.5, 5, 15, 40 and 80 μ M, 72 hours) inhibits the proliferation of U251, CCRF-CEM, Hs578T, NCI-ADR-RES cells ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	YF-2 (20 mg/kg, 2 hours before electric shock or 5 mg/kg, 30 min before the electric shock, i.p.) rescues the defect in contextual memory in mice, and shows no effect on contextual memory alone at 20 mg/kg in mice ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Sci Total Environ. 2021, 147014.

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REFERENCES

[1]. FENG, Yen, et al. HISTONE ACETYLTRANSFERASE ACTIVATORS AND USES THEREOF. WO 2011072243A1.

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

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