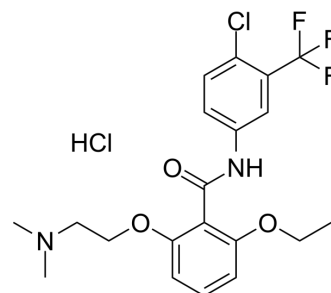


## YF-2 hydrochloride

Cat. No.:	HY-16531A
CAS No.:	1312005-62-1
Molecular Formula:	C <sub>20</sub> H <sub>23</sub> Cl <sub>2</sub> F <sub>3</sub> N <sub>2</sub> O <sub>3</sub>
Molecular Weight:	467.31
Target:	Histone Acetyltransferase
Pathway:	Epigenetics
Storage:	-20°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 100 mg/mL (213.99 mM; Need ultrasonic)  
H<sub>2</sub>O : 3.12 mg/mL (6.68 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.1399 mL	10.6995 mL	21.3991 mL
	5 mM	0.4280 mL	2.1399 mL	4.2798 mL
	10 mM	0.2140 mL	1.0700 mL	2.1399 mL

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

### BIOLOGICAL ACTIVITY

#### Description

YF-2 hydrochloride is a highly selective, blood-brain-barrier permeable histone acetyltransferase activator, acetylates H3 in the hippocampus, with EC<sub>50</sub>s 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<sup>[1]</sup>.

#### IC<sub>50</sub> & 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 μM, 72 hours) inhibits the proliferation of U251, CCRF-CEM, Hs578T, NCI-ADR-RES cells<sup>[1]</sup>.

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<sup>[1]</sup>.

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

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## CUSTOMER VALIDATION

- Sci Total Environ. 2021, 147014.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

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

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

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