# Oxotremorine sesquifumarate

**Cat. No.:** HY-101239

**CAS No.:** 17360-35-9

**Molecular Formula:** $C_{16}H_{22}N_2O_5$

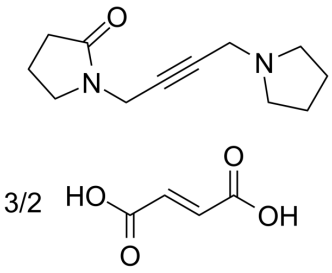
**Molecular Weight:** 380.4

**Target:** mAChR

**Pathway:** GPCR/G Protein; Neuronal Signaling

**Storage:** 4°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 : 125 mg/mL (328.60 mM; Need ultrasonic)

$H_2O$ : 100 mg/mL (262.88 mM; Need ultrasonic)

**Preparing Stock Solutions**

| Solvent / Mass / Concentration | 1 mg | 5 mg | 10 mg |
|---|---|---|---|
| 1 mM | 2.6288 mL | 13.1441 mL | 26.2881 mL |
| 5 mM | 0.5258 mL | 2.6288 mL | 5.2576 mL |
| 10 mM | 0.2629 mL | 1.3144 mL | 2.6288 mL |

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

**In Vivo**

1. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (6.57 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.08 mg/mL (5.47 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (5.47 mM); Clear solution

## BIOLOGICAL ACTIVITY

**Description**

Oxotremorine sesquifumarate is a mAChR agonist that mainly activates M2 receptors. Oxotremorine sesquifumarate can be used for neurological research[1][2].

**In Vitro**

Oxotremorine (10.5 μM) produces a paralytic effect on twitch responses of rat diaphragm in vitro to direct and indirect stimulation[1].

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

**In Vivo**

In rats with sciatic nerve injuries, Oxotremorine (10, 5, 2 1 μg; 10 μL) i.t. dose-dependently suppresses the tactile

hypersensitivity[2].

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

## REFERENCES


[1]. M Das, D K Ganguly, et al. Enhancement by oxotremorine of acetylcholine release from the rat phrenic nerve. Br J Pharmacol. 1978 Feb;62(2):195-8.

[2]. Zhiyang Song, et al. Muscarinic receptor activation potentiates the effect of spinal cord stimulation on pain-related behavior in rats with mononeuropathy. Neurosci Lett. 2008 May 2;436(1):7-12.





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