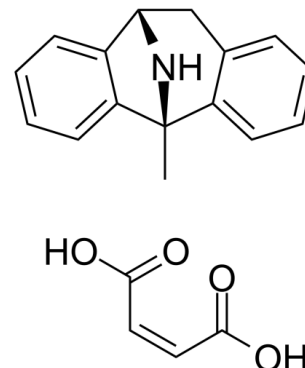


Data Sheet

Product Name:	(-)-Dizocilpine (maleate)
Cat. No.:	CS-3784
CAS No.:	121917-57-5
Molecular Formula:	C ₂₀ H ₁₉ NO ₄
Molecular Weight:	337.37
Target:	iGluR
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling
Solubility:	DMSO : 100 mg/mL (296.41 mM; Need ultrasonic); Ethanol : 25 mg/mL (74.10 mM; Need ultrasonic); H ₂ O : 8.33 mg/mL (24.69 mM; ultrasonic and warming and heat to 60°C)



BIOLOGICAL ACTIVITY:

(-)-Dizocilpine maleate ((-)-MK-801 maleate) is a less active (-)-enantiomer of Dizocilpine. (-)-Dizocilpine maleate is a selective and non-competitive **N-methyl-D-aspartate (NMDA) receptor** antagonist with a **K_i** of 211.7 nM. (-)-Dizocilpine maleate has antidepressant effects^{[1][2]}. IC₅₀ & Target: K_i: 211.7 nM (N-methyl-D-aspartate (NMDA) receptor)^[1] **In Vitro:** (-)-Dizocilpine maleate ((-)-MK-801 maleate) significantly inhibited the uptake of all three (norepinephrine, dopamine and serotonin) monoamine transporters in a dose-dependent manner in HEK cells. The K_i values of (-)-Dizocilpine on the norepinephrine, dopamine and serotonin transporters are 3.7 μM, 40 μM and 47 μM, respectively^[2]. **In Vivo:** (-)-Dizocilpine maleate (0.1 mg/kg; intraperitoneal injection; male adult C57BL/6 mice) treatment induces rapid antidepressant effects in the social defeat stress model^[1].

References:

[1]. Yang B, et al. Antidepressant Effects of (+)-MK-801 and (-)-MK-801 in the Social Defeat Stress Model. Int J Neuropsychopharmacol. 2016 Dec 30;19(12).

[2]. Nishimura M, et al. MK-801 blocks monoamine transporters expressed in HEK cells. FEBS Lett. 1998 Feb 27;423(3):376-80.

CAIndexNames:

5H-Dibenzo[a,d]cyclohepten-5,10-imine, 10,11-dihydro-5-methyl-, (5R,10S)-, (2Z)-2-butenedioate (1:1)

SMILES:

C[C@@]1(N2)C3=CC=CC=C3C[C@H]2C4=CC=CC=C14.O=C(O)/C=C/C(O)=O

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