Osemozotan hydrochloride

Cat. No.: HY-100426A

CAS No.: 137275-80-0

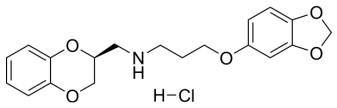
Molecular Formula: $C_{19}H_{22}ClNO_5$

Molecular Weight: 379.83

Target: 5-HT Receptor

Pathway: GPCR/G Protein; Neuronal Signaling

Storage: Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

Osemozotan hydrochloride (MKC242) is a selective 5-HT_{1A} receptor agonist. Osemozotan hydrochloride decreases the number of c-Fos-positive cells caused by MAMP in mice. Osemozotan hydrochloride can be used for the research of depressive disorder[1][2].

In Vivo

Osemozotan hydrochloride (1 mg/kg; i.p.; 20 min after picrotoxin treatment) ameliorates picrotoxin-induced decrease in female preference with the combination of (+)-SKF-10,047[1].

Osemozotan hydrochloride (1 mg/kg; i.p.; once) decreases the number of c-Fos-positive cells caused by MAMP[2].

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

Animal Model:	Female CD-1 mice with picrotoxin-induced decrease in female preference[1]
Dosage:	1 mg/kg
Administration:	Intraperitoneal injection; 1 mg/kg; 20 min after picrotoxin treatment
Result:	Ameliorated the picrotoxin-induced decrease in the female preference by co-administration WITH (+)-SKF-10,047 (5 mg/kg). Showed no effect on the picrotoxin-induced decrease in the female preference when treated alone.

Animal Model:	ICR mice with MAMP injection[2]
Dosage:	1 mg/kg
Administration:	Intraperitoneal injection; 1 mg/kg; once
Result:	Significantly decreased the number of c-Fos-positive cells induced by MAMP in the medial prefrontal cortex and striatum, but did not change the number of c-Fos-positive cells.

REFERENCES

[1]. Hasebe S, et al. Anti-anhedonic effect of selective serotonin reuptake inhibitors with affinity for sigma-1 receptors in picrotoxin-treated mice. Br J Pharmacol. 2017 Feb;174(4):314-327.

[2]. Tsuchida R, et al. Inhibitory effects of osemozotan, a serotonin 1A-receptor agonist, on methamphetamine-induced c-Fos expression in prefrontal cortical neurons. Biol Pharm Bull. 2009 Apr;32(4):728-31.

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