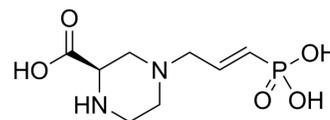


Midafotel

Cat. No.:	HY-107718
CAS No.:	117414-74-1
Molecular Formula:	C ₈ H ₁₅ N ₂ O ₅ P
Molecular Weight:	250.19
Target:	iGluR
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Midafotel (SDZ-EAA 494) is a potent and competitive NMDA antagonist with an ED ₅₀ value of 39 nM. Midafotel causes intense stereotyped behaviors. Midafotel shows neuroprotective effects ^{[1][2][3]} .								
IC₅₀ & Target	NMDA Receptor 39 nM								
In Vivo	<p>Midafotel (15 mg/kg; i.p.) causes intense stereotyped behaviors in rats^[2].</p> <p>Midafotel (1.5, 4.5, 15 mg/kg; i.v.; initiated 15 min prior to MCA occlusion (followed by constant infusion at 1, 3 or 10 mg/kg/h)) produces dose-dependent reductions in the volumes of infarction; the dose of 4.5 mg/kg being the most effective in focal cerebral ischemia in the rat^[3].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td>Animal Model:</td> <td>Adult female Wistar rats^[2]</td> </tr> <tr> <td>Dosage:</td> <td>15 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>i.p.</td> </tr> <tr> <td>Result:</td> <td>Induced the typical PCP-like behavioral syndrome with ataxia, hyperlocomotion and stereotyped behaviors, i.e., head weaving, stereotyped sniffing, face washing and grooming, significantly increased extracellular levels of HVA and 5-HIAA in the striatum.</td> </tr> </table>	Animal Model:	Adult female Wistar rats ^[2]	Dosage:	15 mg/kg	Administration:	i.p.	Result:	Induced the typical PCP-like behavioral syndrome with ataxia, hyperlocomotion and stereotyped behaviors, i.e., head weaving, stereotyped sniffing, face washing and grooming, significantly increased extracellular levels of HVA and 5-HIAA in the striatum.
Animal Model:	Adult female Wistar rats ^[2]								
Dosage:	15 mg/kg								
Administration:	i.p.								
Result:	Induced the typical PCP-like behavioral syndrome with ataxia, hyperlocomotion and stereotyped behaviors, i.e., head weaving, stereotyped sniffing, face washing and grooming, significantly increased extracellular levels of HVA and 5-HIAA in the striatum.								

REFERENCES

- [1]. Lowe DA, et al. D-CPP-ene (SDZ EAA 494), a potent and competitive N-methyl-D-aspartate (NMDA) antagonist: effect on spontaneous activity and NMDA-induced depolarizations in the rat neocortical slice preparation, compared with other CPP derivatives and MK-801. *Neurosci Lett.* 1990 Jun 8;113(3):315-21.
- [2]. Potschka H, et al. Effects of the NMDA receptor antagonist D-CPPene on extracellular levels of dopamine and dopamine and serotonin metabolites in striatum of kindled and non-kindled rats. *Eur J Pharmacol.* 1999 Jun 18;374(2):175-87.
- [3]. Park CK, McCulloch J, Kang JK, Choi CR. Efficacy of D-CPPene, a competitive N-methyl-D-aspartate antagonist in focal cerebral ischemia in the rat. *Neurosci Lett.* 1992 Nov 23;147(1):41-4.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA