

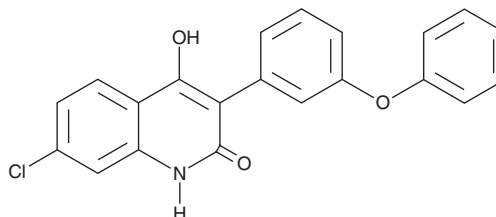
PRODUCT INFORMATION



L-701,324

Item No. 30687

CAS Registry No.: 142326-59-8
Formal Name: 7-chloro-4-hydroxy-3-(3-phenoxyphenyl)-2(1H)-quinolinone
MF: C₂₁H₁₄ClNO₃
FW: 363.8
Purity: ≥98%
UV/Vis.: λ_{max}: 226 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

L-701,324 is supplied as a crystalline solid. A stock solution may be made by dissolving the L-701,324 in the solvent of choice, which should be purged with an inert gas. L-701,324 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of L-701,324 in these solvents is approximately 15 and 30 mg/ml, respectively.

L-701,324 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, L-701,324 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. L-701,324 has a solubility of approximately 0.33 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

L-701,324 is an NMDA receptor antagonist.¹ It inhibits NMDA-induced currents in rat cortical neurons (K_i = 5.4 nM). L-701,324 inhibits seizures induced by N-methyl-DL-aspartate, pentylenetetrazole (PTZ; Item No. 18682), or electroshock, as well as audiogenic seizures in mice (ED₅₀s = 3.5, 2.8, 1.4, and 0.96 mg/kg, respectively).² It reduces the number of audiogenic seizures in a rat model of ethanol-induced withdrawal seizures when administered at a dose of 5 mg/kg.³ L-701,324 (2.5 and 5 mg/kg) reduces amphetamine-induced hyperactivity in rats.⁴

References

1. Priestley, T., Loughton, P., Macaulay, A.J., *et al.* Electrophysiological characterisation of the antagonist properties of two novel NMDA receptor glycine site antagonists, L-695,902 and L-701,324. *Neuropharmacology* **35(11)**, 1573-1581 (1996).
2. Bristow, L.J., Hutson, P.H., Kulagowski, J.J., *et al.* Anticonvulsant and behavioral profile of L-701,324, a potent, orally active antagonist at the glycine modulatory site on the N-methyl-D-aspartate receptor complex. *J. Pharmacol. Exp. Ther.* **279(2)**, 492-501 (1996).
3. Kotlinska, J. and Liljequist, S. Oral administration of glycine and polyamine receptor antagonists blocks ethanol withdrawal seizures. *Psychopharmacology (Berl)* **127(3)**, 238-244 (1996).
4. Bristow, L.J., Flatman, K.L., Hutson, P.H., *et al.* The atypical neuroleptic profile of the glycine/N-methyl-D-aspartate receptor antagonist, L-701,324, in rodents. *J. Pharmacol. Exp. Ther.* **277(2)**, 578-585 (1996).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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