

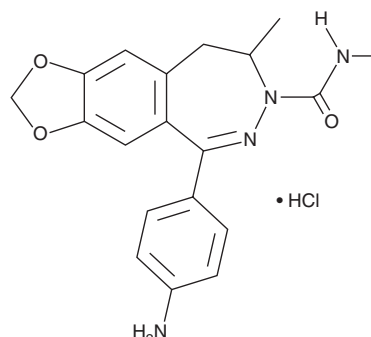
PRODUCT INFORMATION



GYKI 53655
Item No. 39842

CAS Registry No.: 143692-48-2
Formal Name: 5-(4-aminophenyl)-8,9-dihydro-N,8-dimethyl-7H-1,3-dioxolo[4,5-h][2,3]benzodiazepine-7-carboxamide, monohydrochloride

Synonym: LY300168
MF: C₁₉H₂₀N₄O₃ • HCl
FW: 388.9
Purity: ≥95%
Supplied as: A 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

GYKI 53655 is supplied as a solid. A stock solution may be made by dissolving the GYKI 53655 in the solvent of choice, which should be purged with an inert gas. GYKI 53655 is soluble in acetonitrile and DMSO.

Description

GYKI 53655 is an allosteric AMPA receptor antagonist.¹ It inhibits AMPA- and kainite-induced inward currents in whole-cell patch-clamp assays using primary rat hippocampal neurons (IC₅₀s = 1.1 and 1.5 μM, respectively). GYKI 53655 decreases tonic and clonic audiogenic seizure severity in mice (ED₅₀s = 1.3 and 2 mg/kg, respectively) and reduces mortality in a mouse model of global cerebral ischemia induced by magnesium dichloride (ED₅₀ = 8.2 mg/kg).² It inhibits seizures induced by maximal electroshock (MES) in mice (ED₅₀ = 4.6 mg/kg) but induces motor impairment at a half-maximal toxic dose (TD₅₀) value of 8.7 mg/kg.¹

References

1. Donevan, S.D., Yamaguchi, S.-I., and Rogawski, M.A. Non-N-methyl-D-aspartate receptor antagonism by 3-N-substituted 2,3-benzodiazepines: Relationship to anticonvulsant activity. *J. Pharmacol. Exp. Ther.* **271**(1), 25-29 (1994).
2. Szabados, T., Gigler, G., Gacsályi, I., *et al.* Comparison of anticonvulsive and acute neuroprotective activity of three 2,3-benzodiazepine compounds, GYKI 52466, GYKI 53405, and GYKI 53655. *Brain Res. Bull.* **55**(3), 387-391 (2001).

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.

WARRANTY AND LIMITATION OF REMEDY
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