

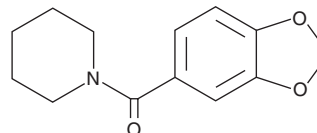
PRODUCT INFORMATION



1-BCP

Item No. 33428

CAS Registry No.: 34023-62-6
Formal Name: 1,3-benzodioxol-5-yl-1-piperidiny-methanone
MF: C₁₃H₁₅NO₃
FW: 233.3
Purity: ≥98%
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

1-BCP is supplied as a crystalline solid. A stock solution may be made by dissolving the 1-BCP in the solvent of choice, which should be purged with an inert gas. 1-BCP is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 1-BCP in these solvents is approximately 30, 10, and 20 mg/ml, respectively.

Description

1-BCP is a positive allosteric modulator of AMPA receptors.¹⁻³ 1-BCP (1 mM) selectively increases the release of norepinephrine induced by AMPA, but not NMDA or kainic acid, in rat hippocampal slices.¹ It increases the amplitude and duration of primed field excitatory postsynaptic potentials (EPSPs) in rat hippocampal slices (EC₅₀s = 480 and 590 μM, respectively).² 1-BCP enhances memory in two-odor discrimination and radial maze tests, as well as in the Morris water maze, in rats when administered at a dose of 120 mg/kg.³

References

1. Desai, M.A., Valli, M.J., Monn, J.A., *et al.* 1-BCP, a memory-enhancing agent, selectively potentiates AMPA-induced [³H]norepinephrine release in rat hippocampal slices. *Neuropharmacology* **34(2)**, 141-147 (1995).
2. Arai, A., Kessler, M.M., Xiao, P., *et al.* A centrally active drug that modulates AMPA receptor gated currents. *Brain. Res.* **638(1-2)**, 343-346 (1994).
3. Staubli, U., Rogers, G., and Lynch, G. Facilitation of glutamate receptors enhances memory. *Proc. Natl. Acad. Sci. USA* **91(2)**, 777-781 (1994).

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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