

Certificate of Analysis

Print Date: Jan 15th 2016

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Product Name: 1-BCP Catalog No.: 1048 Batch No.: 1

CAS Number: 34023-62-6

IUPAC Name: 1-(1,3-Benzodioxol-5-ylcarbonyl)piperidine

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{13}H_{15}NO_3$ Batch Molecular Weight: 233.27

Physical Appearance: White crystalline solid
Solubility: DMSO to 100 mM
Storage: Store at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.2$ (Ethyl acetate:Petroleum ether [1:1])

Melting Point:Between 57 - 58°CHPLC:Shows 100% purity

¹H NMR: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 66.94 6.48 6 0 0 0 0 Found 66.85 6.48 6.14 0 0 0



Product Information

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CAS Number: 34023-62-6

IUPAC Name: 1-(1,3-Benzodioxol-5-ylcarbonyl)piperidine

Description:

A centrally active selective potentiator of AMPA-mediated responses. Facilitates memory retention in rats.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₃H₁₅NO₃ Batch Molecular Weight: 233.27

Physical Appearance: White crystalline solid

Minimum Purity: >99%

Batch Molecular Structure:

Storage: Store at RT

Solubility & Usage Info:

DMSO to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Arai et al (1994) A centrally active drug that modulates AMPA receptor gated currents. Brain Res. 638 343. PMID: 7911064.

Desai et al (1995) 1-BCP, a memory-enhancing agent, selectively potentiates AMPA-induced [3H]norepinephrine release in rat hippocampal slices. Neuropharmacology **34** 141. PMID: 7542369.

Vanove (1997) Effects of AMPA receptor positive modulators on amphetamine- and dizocilpine-induced locomotion. Eur.J.Pharmacol. 332 115. PMID: 9286612.

Yamada et al (1998) AMPA receptor activation potentiated by the AMPA modulator 1-BCP is toxic to cultured rat hippocampal neurons. Neurosci.Lett. 249 119. PMID: 9682831.