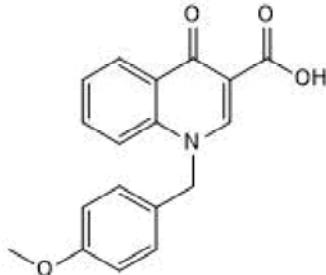


Certificate of Analysiswww.tocris.com**Product Name:** BQCA**Catalog No.:** 6872**Batch No.:** 1

CAS Number: 338747-41-4

IUPAC Name: 1,4-Dihydro-1-[(4-methoxyphenyl)methyl]-4-oxo-3-quinolinecarboxylic acid

1. PHYSICAL AND CHEMICAL PROPERTIES**Batch Molecular Formula:** C₁₈H₁₅NO₄.½H₂O**Batch Molecular Weight:** 318.33**Physical Appearance:** White solid**Solubility:** DMSO to 20 mM with gentle warming**Storage:** Store at -20°C**Batch Molecular Structure:****2. ANALYTICAL DATA****HPLC:** Shows 98.1% purity**¹H NMR:** Consistent with structure**Mass Spectrum:** Consistent with structure**Microanalysis:** Carbon Hydrogen Nitrogen

Theoretical 67.92 5.07 4.4

Found 68.07 5.21 4.72

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Product Information

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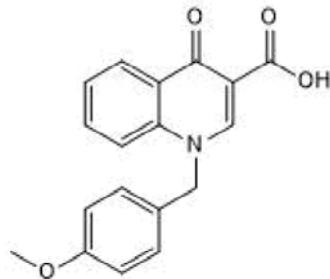
Description:

Muscarinic M₁ receptor positive allosteric modulator (pK_B 5.76 - 5.82). Exhibits selectivity for M₁ over M₃ and M₅ receptors. Enhances ACh effects at M₁ receptors in an IP₁- accumulation assay, without affecting ACh binding. Increases markers of neuronal activation in brains of wild-type but not M₁^{-/-} mice in vivo. Prevents Scopolamine (Cat. No. 1414)-induced memory deficits in mice in a contextual fear conditioning model.

Physical and Chemical Properties:Batch Molecular Formula: C₁₈H₁₅NO₄.½H₂O

Batch Molecular Weight: 318.33

Physical Appearance: White solid

Minimum Purity: >98%**Batch Molecular Structure:****References:**

Khajehali et al (2018) Probing the binding site of novel selective positive allosteric modulators at the M₁ muscarinic acetylcholine receptor. *Biochem.Pharmacol* **154** 243. PMID: 29777683.

Ma et al (2009) Selective activation of the M₁ muscarinic acetylcholine receptor achieved by allosteric potentiation. *Proc.Natl.Acad.Sci.U.S.A.* **106** 15950. PMID: 19717450.

Storage: Store at -20°C**Solubility & Usage Info:**

DMSO to 20 mM with gentle warming

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.

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