

**Product Name:** (-)-Bicuculline methobromide

**Catalog No.:** 0109

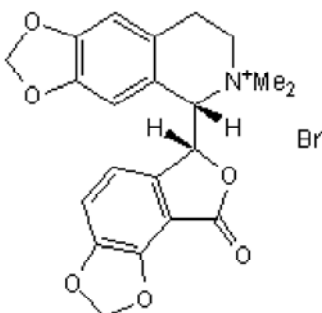
**Batch No.:** 17

CAS Number: 73604-30-5

IUPAC Name: [R-(R\*,S\*)]-5-(6,8-Dihydro-8-oxofuro[3,4-e]-1,3-benzodioxol-6-yl)-5,6,7,8-tetrahydro-6,6-dimethyl-1,3-dioxolo[4,5-g]isoquinolinium bromide

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>21</sub>H<sub>20</sub>BrNO<sub>6</sub>·¾H<sub>2</sub>O  
**Batch Molecular Weight:** 475.81  
**Physical Appearance:** White solid  
**Solubility:** water to 50 mM  
 phosphate buffered saline to 100 mM  
**Storage:** Store at RT  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**TLC:** R<sub>f</sub> = 0.32 (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])  
**HPLC:** Shows 99.9% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Optical Rotation:** [α]<sub>D</sub> = -112.6 (Concentration = 1, Solvent = Methanol)  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	53.01	4.55	2.94
Found	53.02	4.51	3.15

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

**Product Name:** (-)-Bicuculline methobromide

**Catalog No.:** 0109

**Batch No.:** 17

CAS Number: 73604-30-5

IUPAC Name: [R-(R\*,S\*)]-5-(6,8-Dihydro-8-oxofuro[3,4-e]-1,3-benzodioxol-6-yl)-5,6,7,8-tetrahydro-6,6-dimethyl-1,3-dioxolo[4,5-g]isoquinolinium bromide

**Description:**

Methobromide salt of (+)-bicuculline. Water soluble and more stable than bicuculline. Non-GABA receptor-mediated actions reported. Methiodide Salt and Methochloride Salt also available.

**Physical and Chemical Properties:**

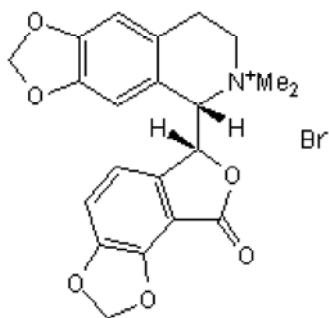
Batch Molecular Formula: C<sub>21</sub>H<sub>20</sub>BrNO<sub>6</sub>·¾H<sub>2</sub>O

Batch Molecular Weight: 475.81

Physical Appearance: White solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**References:**

**Seutin and Johnson** (1999) Recent advances in the pharmacology of quaternary salts of bicuculline. *TiPS* **20** 268. PMID: 10390643.

**Sperber et al** (1987) Nigral infusions of muscimol or bicuculline facilitate seizures in developing rats. *Brain Res.* **465** 243. PMID: 3440204.

**Bowery et al** (1983) Characteristics of GABA<sub>B</sub> receptor binding sites on rat whole brain synaptic membranes. *Br.J.Pharmacol.* **78** 191. PMID: 6297646.

**Storage:** Store at RT

**Solubility & Usage Info:**

water to 50 mM

phosphate buffered saline 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.

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

**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors

Tel:+1 612 379 2956