# TOCRIS a biotechne brand

## **Certificate of Analysis**

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

Catalog No.: 0109 Batch No.: 18

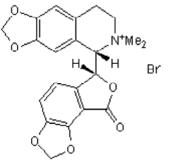
IUPAC Name:

CAS Number: 66016-70-4

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: Batch Molecular Weight: Physical Appearance: Solubility: Storage: Batch Molecular Structure:  $C_{21}H_{20}BrNO_6.H_2O$ 480.32 Pale green solid water to 50 mM Store at RT



## 2. ANALYTICAL DATA

HPLC:Show<sup>1</sup>H NMR:ConMass Spectrum:ConOptical Rotation:[α]<sub>D</sub>Microanalysis:Figure 1

Shows 99.1% purity Consistent with structure Consistent with structure [ $\alpha$ ]<sub>D</sub> = -99.7 (Concentration = 1, Solvent = Methanol) Carbon Hydrogen Nitrogen Theoretical 52.51 4.62 2.92 Found 52.36 4.51 2.93

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#### **Description:**

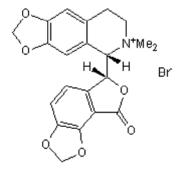
Methobromide salt of (+)-bicuculline. Water soluble and more stable than bicuculline. Non-GABA receptor-mediated actions reported. Methoiodide Salt and Methochloride Salt also available.

#### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>21</sub>H<sub>20</sub>BrNO<sub>6</sub>.H<sub>2</sub>O Batch Molecular Weight: 480.32 Physical Appearance: Pale green solid

#### Minimum Purity: ≥98%

#### **Batch Molecular Structure:**



#### Storage: Store at RT

#### Solubility & Usage Info:

water to 50 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  $45-60^{\circ}C$  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:

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.

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