

**Product Name:** CFM-2

**Catalog No.:** 1082

**Batch No.:** 4

CAS Number: 178616-26-7

IUPAC Name: 1-(4'-Aminophenyl)-3,5-dihydro-7,8-dimethoxy-4*H*-2,3-benzodiazepin-4-one

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>17</sub>H<sub>17</sub>N<sub>3</sub>O<sub>3</sub>·¼H<sub>2</sub>O

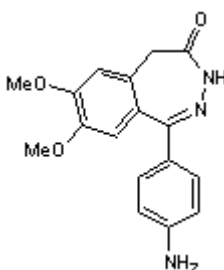
**Batch Molecular Weight:** 315.84

**Physical Appearance:** Off-white solid

**Solubility:** DMSO to 100 mM

**Storage:** Store at RT

**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**TLC:** R<sub>f</sub> = 0.35 (Dichloromethane:Methanol [9:1])

**Melting Point:** Between 226 - 228°C

**HPLC:** Shows >98.4% purity

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	64.65	5.58	13.3
Found	64.82	5.53	13.24

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**Description:**

Novel, selective non-competitive AMPA antagonist. Highly potent, long-acting anticonvulsant.

**Physical and Chemical Properties:**

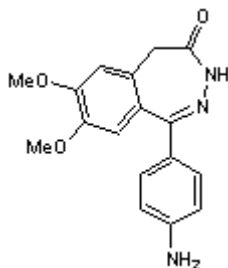
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Batch Molecular Weight: 315.84

Physical Appearance: Off-white solid

**Minimum Purity:** >98%

**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:**

**Chimirri et al** (1997) 1-Aryl-3,5-dihydro-4H-2,3-benzodiazepin-4-ones: novel AMPA receptor antagonists. *J.Med.Chem.* **40** 1258. PMID: 9111300.

**De Sarro et al** (1999) Effects of some AMPA receptor antagonists on the development of tolerance in epilepsy-prone rats and in pentylenetetrazole kindled rats. *Eur.J.Pharmacol.* **368** 149. PMID: 10193651.

**De Sarro et al** (1999) Anticonvulsant activity and plasma level of 2,3-benzodiazepin-4-ones (CFMs) in genetically epilepsy-prone rats. *Pharmacol.Biochem.Behav.* **63** 621. PMID: 10462191.

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**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