

## Certificate of Analysis

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**Product Name:** Quinolinic acid

**Catalog No.:** 0225

**Batch No.:** 8

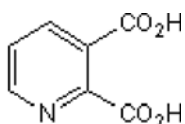
CAS Number: 89-00-9

EC Number: 201-874-8

IUPAC Name: Pyridine-2,3-dicarboxylic acid

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>7</sub>H<sub>5</sub>NO<sub>4</sub>  
**Batch Molecular Weight:** 167.12  
**Physical Appearance:** White solid  
**Solubility:** 1eq. NaOH to 50 mM  
**Storage:** Store at RT  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**Melting Point:** Between 240 - 242°C  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	50.3	3.01	8.38
Found	50.56	2.94	8.31

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

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IUPAC Name: Pyridine-2,3-dicarboxylic acid

**Description:**

Endogenous NMDA agonist and transmitter candidate. May distinguish between NMDA receptor subtypes.

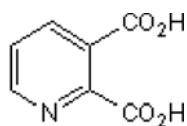
**Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>7</sub>H<sub>5</sub>NO<sub>4</sub>

Batch Molecular Weight: 167.12

Physical Appearance: White solid

**Batch Molecular Structure:**



**Storage:** Store at RT

**Solubility & Usage Info:**

1eq. NaOH 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°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:**

**Prada de Carvalho et al** (1996) The endogenous agonist quinolinic acid and the non-endogenous homoquinolinic acid discriminate between NMDAR2 receptor subunits. *Neurochem.Int.* **28** 445. PMID: 8740453.

**Monaghan and Beaton** (1991) Quinolinic acid differentiates between forebrain and cerebellar NMDA receptors. *Eur.J.Pharmacol.* **194** 123. PMID: 1676371.

**Stone and Burton** (1988) NMDA receptors and ligands in the vertebrate CNS. *Prog.Neurobiol.* **30** 333. PMID: 2830636.

**Stone and Perkins** (1981) Quinolinic acid: a potent endogenous excitant at amino acid receptors in the rat CNS. *Eur.J.Pharmacol.* **72** 411. PMID: 6268428.

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