

## Certificate of Analysis

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**Product Name:** IOX 1

**Catalog No.:** 4464

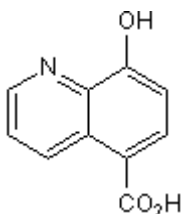
**Batch No.:** 1

CAS Number: 5852-78-8

IUPAC Name: 8-Hydroxy-5-quinolinecarboxylic acid

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>10</sub>H<sub>7</sub>NO<sub>3</sub>  
**Batch Molecular Weight:** 189.17  
**Physical Appearance:** Yellow solid  
**Solubility:** DMSO to 100 mM  
 1eq. NaOH to 100 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**HPLC:** Shows 99.1% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	63.49	3.73	7.4
Found	63.57	3.7	7.27

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

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IUPAC Name: 8-Hydroxy-5-quinolinecarboxylic acid

**Description:**

Histone demethylase JMJD inhibitor (IC<sub>50</sub> values are 0.12, 0.17, 0.2, 0.3, 0.6 and 1 µM for JMJD3, JMJD1A, JMJD2A, JMJD2E, JMJD2C and UTX respectively). Cell permeable; inhibits JMJD2A-mediated H3K9me3 demethylation in HeLa cells.

**Physical and Chemical Properties:**

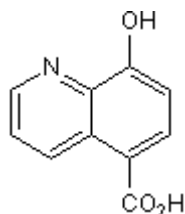
Batch Molecular Formula: C<sub>10</sub>H<sub>7</sub>NO<sub>3</sub>

Batch Molecular Weight: 189.17

Physical Appearance: Yellow solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**References:**

**King et al** (2010) Quantitative high-throughput screening identifies 8-hydroxyquinolines as cell-active histone demethylase inhibitors. *PLoS One*. **5** e15535. PMID: 21124847.

**Storage:** Store at +4°C

**Solubility & Usage Info:**

DMSO to 100 mM

1eq. NaOH 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.

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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