

## Certificate of Analysis

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**Product Name:** NQDI 1

**Catalog No.:** 4429

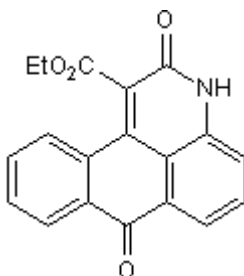
**Batch No.:** 1

**CAS Number:** 175026-96-7

**IUPAC Name:** 2,7-Dihydro-2,7-dioxo-3*H*-naphtho[1,2,3-*de*]quinoline-1-carboxylic acid ethyl ester

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>19</sub>H<sub>13</sub>NO<sub>4</sub>  
**Batch Molecular Weight:** 319.31  
**Physical Appearance:** Yellow solid  
**Solubility:** DMSO to 10 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**HPLC:** Shows 100% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	71.47	4.1	4.39
Found	71.43	4.09	4.45

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

## Product Information

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### Description:

Selective inhibitor of apoptosis signal-regulating kinase 1 (ASK1, MAP3K5) ( $IC_{50}$  = 3  $\mu$ M,  $K_i$  = 500 nM).

### Physical and Chemical Properties:

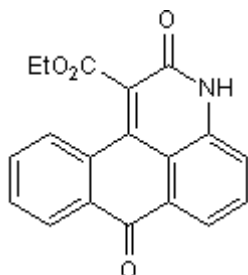
Batch Molecular Formula:  $C_{19}H_{13}NO_4$

Batch Molecular Weight: 319.31

Physical Appearance: Yellow solid

**Minimum Purity:** >99%

### Batch Molecular Structure:



**Storage:** Store at +4°C

### Solubility & Usage Info:

DMSO to 10 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:

**Bu et al** (2001) Synthesis and cytotoxic activity of 7-oxo-7*H*-dibenz[*f,i*]isoquinoline and 7-oxo-7*H*-benzo[*e*]perimidine derivatives. *J. Med. Chem.* **44** (12) 2004. PMID: 11384245.

**Volynets et al** (2011) Identification of 3*H*-naphtho[1,2,3-*de*]quinoline-2,7-diones as inhibitors of apoptosis signal-regulating kinase 1 (ASK1). *J. Med. Chem.* **54** (8) 2680. PMID: 21449566.

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