

## Certificate of Analysis

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**Product Name:** JX 06

**Catalog No.:** 5845

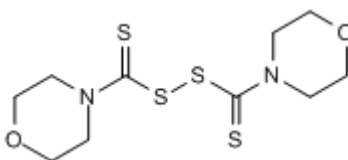
**Batch No.:** 1

CAS Number: 729-46-4

IUPAC Name: Bis(morpholinothiocarbonyl) disulfide

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>10</sub>H<sub>16</sub>N<sub>2</sub>O<sub>2</sub>S<sub>4</sub>  
**Batch Molecular Weight:** 324.51  
**Physical Appearance:** Yellow solid  
**Solubility:** DMSO to 100 mM  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**HPLC:** Shows 98.7% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	37.01	4.97	8.63
Found	37.15	5.01	8.64

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

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**Batch No.:** 1

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IUPAC Name: Bis(morpholinothiocarbonyl) disulfide

**Description:**

Potent and selective pyruvate dehydrogenase kinase (PDK) 1/2/3 inhibitor (IC<sub>50</sub> values are 49, 101 and 313 nM for PDK1, PDK2 and PDK3, respectively). Exhibits selectivity for PDK1/2/3 over PDK4 and a panel of 323 other kinases. Suppresses A549 lung cancer cell proliferation in vitro. Reduces tumor volume of A549 xenografts in mice.

**Physical and Chemical Properties:**

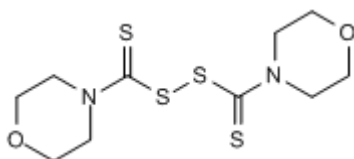
Batch Molecular Formula: C<sub>10</sub>H<sub>16</sub>N<sub>2</sub>O<sub>2</sub>S<sub>4</sub>

Batch Molecular Weight: 324.51

Physical Appearance: Yellow solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**References:**

Sun *et al* (2015) JX06 selectively inhibits pyruvate dehydrogenase kinase PDK1 by a covalent cysteine modification. *Cancer Res.* **75** 4923. PMID: 26483203.

**Storage:** Store at -20°C

**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.

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