



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: $C_{10}H_{16}N_2O_2S_4$

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 98.0% purity

¹H 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

Product Information

Print Date: Mar 3rd 2025

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CAS Number: 729-46-4

IUPAC Name: Bis(morpholinothiocarbonyl) disulfide

Description:

JX 06 is a potent and selective pyruvate dehydrogenase kinase (PDK) 1/2/3 inhibitor (IC $_{50}$ 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: C₁₀H₁₆N₂O₂S₄

Batch Molecular Weight: 324.51 Physical Appearance: Yellow solid

Minimum Purity: ≥98%

Batch Molecular Structure:

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. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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:

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

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