

**Product Name:** iMDK

**Catalog No.:** 5126

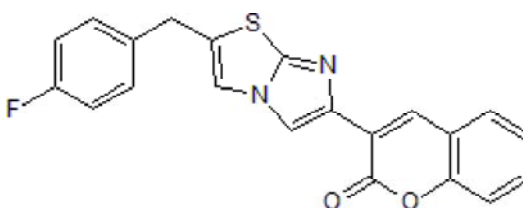
**Batch No.:** 2

CAS Number: 881970-80-5

IUPAC Name: 3-[2-[(4-Fluorophenyl)methyl]imidazo[2,1-b]thiazol-6-yl]-2H-1-benzopyran-2-one

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>21</sub>H<sub>13</sub>FN<sub>2</sub>O<sub>2</sub>S  
**Batch Molecular Weight:** 376.4  
**Physical Appearance:** Off White solid  
**Solubility:** DMSO to 5 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 98.4% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	67.01	3.48	7.44
Found	66.75	3.42	7.31

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

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**Description:**

Suppressor of endogenous midkine (MDK) expression. Inhibits PI 3-K signaling in H441 lung adenocarcinoma cells. Selectively attenuates growth of MDK-expressing cancer cells. Induces apoptosis in H441 cells and suppresses growth of H441 cell xenografts in mice.

**Physical and Chemical Properties:**

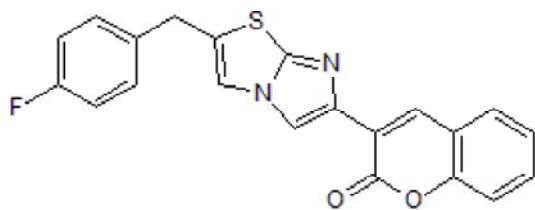
Batch Molecular Formula: C<sub>21</sub>H<sub>13</sub>FN<sub>2</sub>O<sub>2</sub>S

Batch Molecular Weight: 376.4

Physical Appearance: Off White solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**Storage:** Store at +4°C

**CAUTION** - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

**Solubility & Usage Info:**

DMSO to 5 mM

This product can be sluggish to dissolve and can be encouraged by prolonged, rapid stirring with gentle warming (in a 45-60°C) or sonication.

**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:**

Hao *et al* (2013) Inhibition of the growth factor MDK/Midkine by a novel small molecule compound to treat non-small cell lung cancer. PLoS ONE 8 e71093. PMID: 23976985.

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