

**Product Name:** IMDK

**Catalog No.:** 5126

**Batch No.:** 1

**CAS Number:** 881970-80-5

**IUPAC Name:** 3-[2-[(4-Fluorophenyl)methyl]imidazo[2,1-*b*]thiazol-6-yl]-2*H*-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·¼H<sub>2</sub>O

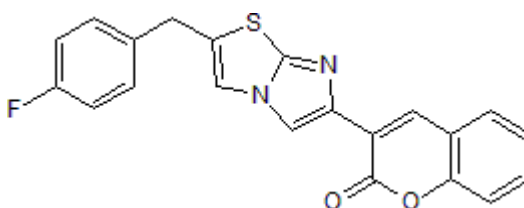
**Batch Molecular Weight:** 380.9

**Physical Appearance:** Beige solid

**Solubility:** DMSO to 5 mM

**Storage:** Store at +4°C

**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 99.5% purity

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon Hydrogen Nitrogen		
Theoretical	66.22	3.57	7.35
Found	66.24	3.56	7.41

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

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USA & CANADA Tel: (800) 343-7475 EUROPE Tel: +44 (0)1235 529449 CHINA Tel: +86 (21) 52380373  
www.RnDSystems.com

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**Description:**

Suppresses endogenous midkine (MDK) expression in H441 lung adenocarcinoma cells. Suppresses tumor growth and induces cell death by inhibiting the PI 3-kinase pathway and inducing apoptosis in a mouse model derived from H441 lung adenocarcinoma cells.

**Physical and Chemical Properties:**

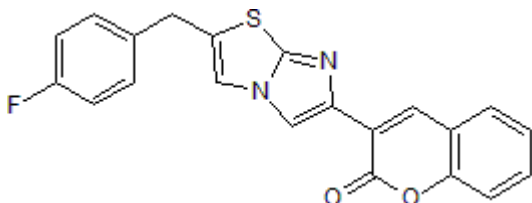
Batch Molecular Formula: C<sub>21</sub>H<sub>13</sub>FN<sub>2</sub>O<sub>2</sub>S.¼H<sub>2</sub>O

Batch Molecular Weight: 380.9

Physical Appearance: Beige 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

**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** (8) e71093. PMID: 23976985.

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