

Certificate of Analysis

www.tocris.com

Product Name: iMDK

Catalog No.: 5126

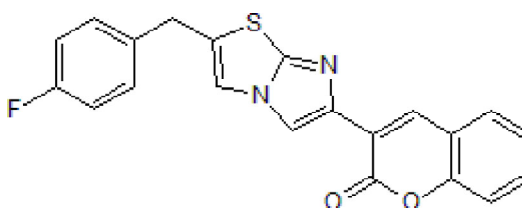
Batch No.: 2

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: C₂₁H₁₃FN₂O₂S
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 98.2% purity
¹H 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

bio-techne.com
info@bio-techne.com
techsupport@bio-techne.com

North America
 Tel: (800) 343 7475

China
info.cn@bio-techne.com
 Tel: +86 (21) 52380373

Europe Middle East Africa
 Tel: +44 (0)1235 529449

Rest of World
www.tocris.com/distributors
 Tel: +1 612 379 2956

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]-2*H*-1-benzopyran-2-one

Description:

iMDK is a 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:

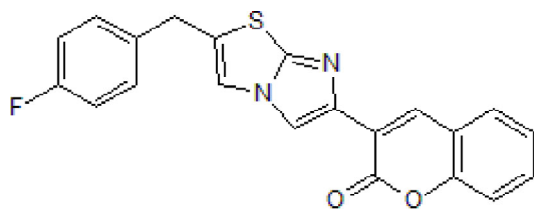
Batch Molecular Formula: C₂₁H₁₃FN₂O₂S

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. *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:

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.

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

bio-techne.com

info@bio-techne.com
techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors
Tel: +1 612 379 2956