

Certificate of Analysis

www.tocris.com

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: C₂₁H₁₃FN₂O₂S·¼H₂O

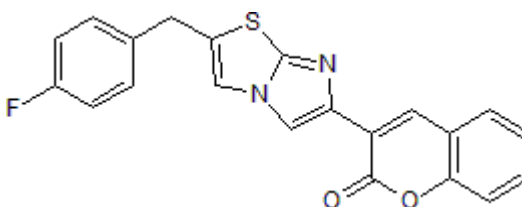
Batch Molecular Weight: 380.9

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

¹H 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

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

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:

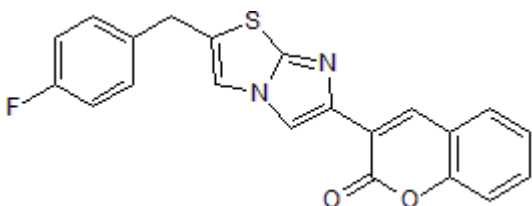
Batch Molecular Formula: C₂₁H₁₃FN₂O₂S.½H₂O

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 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