



# **Certificate of Analysis**

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Product Name: Cysmethynil Catalog No.: 7337 Batch No.: 1

CAS Number: 851636-83-4

IUPAC Name: 5-(3-Methylphenyl)-1-octyl-1*H*-indole-3-acetamide

### 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{25}H_{32}N_2O$ .Batch Molecular Weight:376.54Physical Appearance:White solid

Solubility: ethanol to 100 mM

DMSO to 50 mM

Storage: Store at -20°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 79.74 8.57 7.44 Found 79.81 8.68 7.37



## **Product Information**

Print Date: Oct 21st 2021

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#### **Description:**

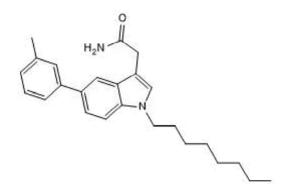
Cysmethynil is an isoprenylcysteine carboxylmethyltransferase (ICMT) inhibitor (IC $_{50}$  = 2.4  $\mu M$ ). Cysmethynil reduces growth of RAS-mutant cell lines in vitro and in vivo (EC $_{50}$  = 20  $\mu M$ ) and reduces cell viability in a variety of cell lines (IC $_{50}$  = 16.8-23.3  $\mu M$ ). Tumor growth, mTOR signaling and cell proliferation are inhibited by cysmethynil; apoptosis is induced. Cysmethynil increases p27 and p21 proteins and arrests cell-cycle at the  $G_1$  phase.

#### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>25</sub>H<sub>32</sub>N<sub>2</sub>O. Batch Molecular Weight: 376.54 Physical Appearance: White solid

**Minimum Purity**: ≥98%

#### **Batch Molecular Structure:**



Storage: Store at -20°C

#### Solubility & Usage Info:

ethanol to 100 mM DMSO to 50 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:

**Moore** *et al* (2020) RAS-targeted therapies: is the undruggable drugged? Nat.Rev.Drug Discov. *19* 533. PMID: 32528145. Inhibition of isoprenylcysteine carboxylmethyltransferase induces cell-cycle arrest and apoptosis through p21 and p21-regulated BNIP3 induction in pancreatic cancer.

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