



# **Certificate of Analysis**

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Product Name: Fumitremorgin C Catalog No.: 2876 Batch No.: 1

CAS Number: 118974-02-0

IUPAC Name: (5aS,12S,14aS)-1,2,3,5a,6,11,12,14a-Octahydro-9-methoxy-12-(2-methyl-1-propen-1-yl)-5H,14H-pyrrolo[1",2":4',5']

pyrazino[1',2':1,6]pyrido[3,4-b]indole-5,14-dione

## 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{22}H_{25}N_3O_3$ Batch Molecular Weight: 379.45

Physical Appearance: Off-white lyophilised solid

Solubility: DMSO to 10 mM Storage: Store at +4°C

**Batch Molecular Structure:** 

## 2. ANALYTICAL DATA

**HPLC:** Shows 98.5% purity

<sup>1</sup>H NMR: Consistent with structure Mass Spectrum: Consistent with structure

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



## **Product Information**

Print Date: Feb 28th 2024

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pyrazino[1',2':1,6]pyrido[3,4-b]indole-5,14-dione

#### **Description:**

Fumitremorgin C is a chemosensitizing agent; selectively reverses BCRP-mediated multidrug resistance to mitoxantrone (Cat. No. 4250), doxorubicin (Cat. No. 2252) and topotecan (Cat. No. 4562) in transfected MCF-7 cells. Does not reverse resistance in P-gp- or MRP-positive cells. Analog (Ko 143, Cat. No. 3241) also available.

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

Batch Molecular Formula:  $C_{22}H_{25}N_3O_3$ Batch Molecular Weight: 379.45

Physical Appearance: Off-white lyophilised 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 10 mM

This product is supplied in lyophilized form. It may appear as a solid, gel or film and be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

## 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:

Rabindran et al (2000) Fumitremorgin C reverses multidrug resistance in cells transfected with the breast cancer resistance protein. Cancer Res. 60 (47). PMID: 10646850.

Rabindran et al (1998) Reversal of a novel multidrug resistance mechanism in human colon carcinoma cells by fumitremorgin C. Cancer Res. 58 5850. PMID: 9865745.

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