



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

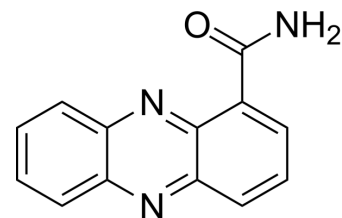
[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

## Oxychloroaphine

|                           |   |       |          |
|---------------------------|---|-------|----------|
| <b>Cat. No.:</b>          | HY-W042191  |       |          |
| <b>CAS No.:</b>           | 550-89-0  |       |          |
| <b>Molecular Formula:</b> | C <sub>13</sub> H <sub>9</sub> N <sub>3</sub> O               |       |          |
| <b>Molecular Weight:</b>  | 223.23  |       |          |
| <b>Target:</b>            | Fungal; Apoptosis; Caspase; Bcl-2 Family; MDM-2/p53; PARP     |       |          |
| <b>Pathway:</b>           | Anti-infection; Apoptosis; Cell Cycle/DNA Damage; Epigenetics |       |          |
| <b>Storage:</b>           | Powder  | -20°C | 3 years  |
|                           |   | 4°C   | 2 years  |
|                           | In solvent  | -80°C | 6 months |
|                           |   | -20°C | 1 month  |



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 10 mg/mL (44.80 mM; ultrasonic and warming and heat to 60°C)

| Concentration             | Solvent | Mass      |            |            |
|---------------------------|---------|-----------|------------|------------|
|                           |         | 1 mg      | 5 mg       | 10 mg      |
| Preparing Stock Solutions | 1 mM    | 4.4797 mL | 22.3984 mL | 44.7968 mL |
|                           | 5 mM    | 0.8959 mL | 4.4797 mL  | 8.9594 mL  |
|                           | 10 mM   | 0.4480 mL | 2.2398 mL  | 4.4797 mL  |

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

#### Description

Oxychloroaphine could be isolated from the bacterium *Pantoea agglomerans* naturally present in soil. Oxychloroaphine has broad-spectrum antifungal activity. Oxychloroaphine has cytotoxicity in a dose-dependent manner and induces apoptosis. Oxychloroaphine can be used in research of cancer<sup>[1][2]</sup>.

#### In Vitro

Oxychloroaphine (1-256 μM; 24 h) has cytotoxicity with IC<sub>50</sub> values for A549, HeLa, and SW480 cancer cell lines between 32 and 40 μM<sup>[2]</sup>.  
 Oxychloroaphine (1-150 μM; A549, HeLa, and SW480 cancer cell lines) causes cell membrane damage, leading to increase apoptosis and leakage of lactate dehydrogenase, and increases production of cytochrome c protein<sup>[2]</sup>.  
 Oxychloroaphine (32 μM; A549 and SW480 cells) induces cycle arrest at G1 phase and induction of sub-G phase<sup>[2]</sup>.  
 Oxychloroaphine (48 h; A549 cells) induces downregulation of antiapoptotic Bcl-2 protein and the activation of proapoptotic protein caspase-3 led to the cleavage of PARP<sup>[2]</sup>.  
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.  
 Cell Viability Assay<sup>[2]</sup>

|                  |  |
|------------------|--|
| Cell Line:       | A549, HeLa, and SW480 cancer cell lines                  |
| Concentration:   | 1, 2, 4, 8, 16, 32, 64, 128, and 256 $\mu$ M             |
| Incubation Time: | 24 hours   |
| Result:          | Inhibited cell proliferative in a dose-dependent manner. |

## REFERENCES

- [1]. Li S, et, al. Comparative metabolomics and transcriptomics analyses provide insights into the high-yield mechanism of phenazines biosynthesis in *Pseudomonas chlororaphis* GP72. *J Appl Microbiol.* 2022 Nov;133(5):2790-2801.
- [2]. Ali HM, et, al. Isolation of Bioactive Phenazine-1-Carboxamide from the Soil Bacterium *Pantoea agglomerans* and Study of Its Anticancer Potency on Different Cancer Cell Lines. *J AOAC Int.* 2016 Sep;99(5):1233-9.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA