

Wortmannin

Kinase Inhibitor

Catalog # P27-900B Lot # K4504-8 CAS # 19545-26-7

# **Product Description**

Molecular Formula: C23H24O8

Appearance: White to off-white powder

Molecular Weight: 428.4

Purity: >98% (TLC); NMR (Conforms)

Solubilization: May be dissolved in DMSO (50 mg/ml); or

ethanol (25 mg/ml)

#### **Alias**

11-(acetyloxy)-1S,6bR,7,8,9aS,10,11R,11bR-octahydro-1-(methoxymethyl)-9a,11b-dimethyl-3Hfuro[4,3,2-de]indeno[4,5-h]-2-benzopyran-3,6,9-trione

# **Specific Activity**

PI3-Kinase inhibitor

# **Storage and Stability**

Store desiccated as supplied at -20°C for up to 1 year. Make and use fresh solutions. Do not store stock solutions. Decomposes slowly in tissue culture media (1).

# **Scientific Background**

Potent and selective inhibitor of PI3-kinase which acts via covalent modification of Lys-802 (2). Inhibits autophagy in rat hepatocytes (3). Inhibits adipocyte differentiation of 3T3-L1 cells (4). A useful tool for probing PI3-K-mediated cellular events (5).

### References

- 1. JL Holleran et al. Anal. Biochem. 2003 323:19.
- 2. MP Wymann et al. Mol. Cell. Biol. 1996 16:1722.
- 3. EF Blommaart et al. Eur. J. Biochem 1997 243:240.
- 4. K Tomiyama et al. Biochem. Biophys. Res. Commun. 1995 212: 263
- 5. M Ui et al. Trends Biochem. Sci. 1995 20:303

# Wortmannin

Kinase Inhibitor

Catalog #
CAS #
Lot #
Purity
Format
Solubilization

Storage & Shipping

P27-900B 19545-26-7 K4504-8

Catalog #

P27-900B-01

P27-900B-05

**Aliquot Size** 

1ma

5mg

>98% (TLC); NMR (Conforms) Lyophilized powder

May be dissolved in DMSO (50 mg/ml); or ethanol (25 mg/ml)

Store desiccated as supplied at -20°C for up to 1 year. Make and use fresh solutions. Do not store stock solutions. Decomposes slowly in tissue culture media.

#### **Molecular Structure**

To place your order, please contact us by phone 1-(604)-232-4600, fax 1-604-232-4601 or by email: <a href="mailto:orders@signalchem.com">orders@signalchem.com</a> <a href="mailto:www.signalchem.com">www.signalchem.com</a>

# **SAFETY DATA SHEET**

# Article 1 - Identification of the Substance

Product Name: Wortmannin Catalog # P27-900B

This product is sold only for research use by qualified laboratory personnel, and is not to be used as a drug, medical device, food additive, cosmetic, nor household chemical. It is not to be used in diagnostic, therapeutic, consumer, agricultural, nor pesticidal applications.

Supplier's Name: SignalChem Biotech Inc.
Street Address: 110-13120 Vanier Place
City, Prov. Postal Code: Richmond, BC, V6V 2J2

Fax: 604-232-4601 EMERGENCY PHONE: 604-232-4600

# **Article 2 - Hazardous Identification**

#### 2.1 Classification of Substance (GHS)

Acute Toxicity: Oral, Category 1 Acute Toxicity: Dermal, Category 1 Acute Toxicity: Inhalation, Category 1

#### 2.2 Label Elements

Classification according to Regulation (EC) No 1272/2008



## GHS Signal Word: DANGER

## **GHS Hazard Phrases:**

H300	Fatal if swallowed.
H310	Fatal in contact with skin.
H330	Fatal if inhaled.

## **GHS Precaution Phrases:**

P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P262	Do not get in eyes, on skin, or on clothing.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	Wear respiratory protection.

#### **GHS Response Phrases:**

P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P304+P340	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated
	clothing. Rinse skin with water [or shower].
P320	Specific treatment is urgent (see on this label).
P330	Rinse mouth.
P352	Wash with plenty of water.
P403	Store in a well-ventilated place.
P405	Store locked up.

## GHS Storage and Disposal Phrases:

Please refer to Section 7 for Storage and Section 13 for Disposal Information

2.3 Other hazards: To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

# **Article 3 - Composition/Information on Ingredients**

3.1 Substance

**Product Name(s):** Wortmannin

Chemical Name: 11-(acetyloxy)-15,6bR,7,8,9aS,10,11R,11bR-octahydro-1-(methoxymethyl)-9a,11b-dimethyl-3Hfuro[4,3,2-

de]indeno[4,5-h]-2-benzopyran-3,6,9-trione

Molecular Formula: $C_{23}H_{24}O_8$ CAS Number:19545-26-7Concentration:100%

# Article 4 - First Aid

#### 4.1 Description of First Aid Measures

**General:** Immediately remove any clothing soiled by the product. Remove breathing apparatus only after contaminated clothing have been completely removed. In case of irregular breathing or respiratory arrest provide artificial respiration.

If Inhaled: Supply fresh air or oxygen; call for doctor. In case of unconsciousness place patient stably in side position for transportation.

In Case of Skin Contact: Immediately wash with water and soap and rinse thoroughly.

In Case of Eye Contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

**If Swallowed:** If symptoms persist consult doctor.

**4.2 Important Symptoms and Effects:** May cause anemia, cough, CNS depression, drowsiness, headache, heart damage, lassitude (weakness, exhaustion), liver damage, narcosis, reproductive effects, teratogenic effects. No further relevant information available.

# **Article 5 – Fire Fighting Measures**

#### 5.1 Extinguishing Media

Use fire fighting measures that suit the environment. A solid water stream may be inefficient.

#### 5.2 Special Hazards

No further relevant information is available.

#### **5.3 Precautions for Fire Fighters**

Mouth respiratory protective device.

## **Article 6 - Accidental Release Measures**

#### **6.1 Personal Precautions**

Not required.

#### **6.2 Environmental Precautions**

Do not let product enter sewers/surface or ground water.

#### 6.3 Methods for Containment and Clean-up

Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

# **Article 7 – Handling and Storage**

## 7.1 Handling Precautions

Thorough dedusting. Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care.

## 7.2 Safe Storage Measures

Keep container tightly closed. Store in accordance with information on the product insert.

# **Article 8 - Exposure Controls/Personal Protection**

#### 8.1 Control Parameters

Contains no substances with occupational exposure limit values.

## 8.2 Specific Engineering Controls

Keep airborne levels low by using a fumehood or local exhaust.

## 8.3 Personal Protection

Eye/Face Protection: Use safety glasses.

Skin Protection: Use chemical resistant gloves. Remove and dispose of gloves properly after use. Wash hands thoroughly after use.

**Body Protection:** Wear a lab coat.

**Respiratory Protection:** If risk is present wear a dust respirator.

# Article 9 - Physical and Chemical Properties

Appearance: White to off-white powder

Odour: data not available
Odour Threshold: data not available

pH: data not available

Melting/Freezing Pt: data not available

**Boiling Pt:** data not available **Flash Pt:** data not available

**Explosive Properties:** data not available

Solubility notes: May be dissolved in DMSO (50 mg/ml); or ethanol (25 mg/ml)

# Article 10 - Stability and Reactivity

10.1 Stability: Stable under recommended transport or storage conditions

**10.2 Conditions to Avoid:** No decomposition if used according to specifications.

10.3 Incompatibility - Materials to Avoid: No decomposition if used according to specifications.

**10.4 Hazardous Decomposition Products:** No further relevant information available.

# **Article 11- Toxicological Information**

11.1 Toxicological Effects: The toxicological effects of this product have not been thoroughly studied.

Acute Toxicity: Oral LDLO (rat): 10 mg/kg; Oral Intraperitoneal LD50 (mouse): 18 mg/kg.

Chronic Toxicity: Investigated as a drug.

For complete information, see Registry of Toxic Effects of Chemical Substances (RTECS) entry. Wortmannin RTECS Number: CB9641000

**Skin Corrosion/Irritation:** No irritating effect. **Eye Damage/Irritation:** No irritating effect.

Respiratory or Skin Sensitization: No sensitizing effects known.

**Germ Cell Mutagenicity:** data not available **Carcinogenicity:** None according to NIOSH

# **Article 12 - Ecological Information**

#### 12.1 Toxicity

Water hazard class 2 (self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

# 12.2 Degradability

Data not available

## Article 13 - Disposal Considerations

#### 13.1 Waste Treatment

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

# **Article 14 - Transport Information**

14.1 DOT

Not dangerous goods

14.2 IMDG

Not dangerous goods

14.2 IATA

Not dangerous goods

# **Article 15 – Regulatory Information**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

## **Article 16 – Other Information**

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. SignalChem shall not be held liable for any damage resulting from handling or from contact with the above product. See the Technical Specification, Packing Slip, Invoice, and Product Catalog for additional terms and conditions of sale.