

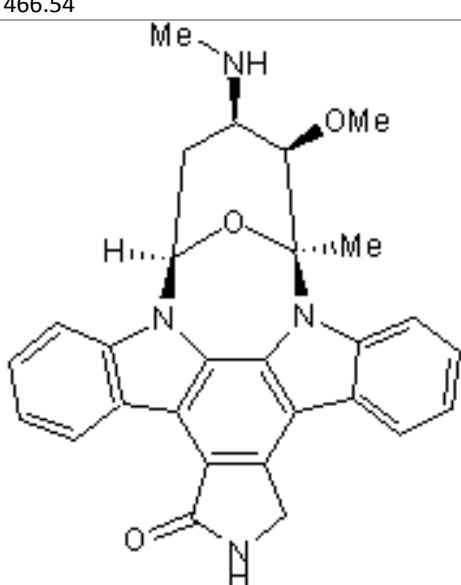
# Staurosporine

SIH-253-1MG

## Overview

<b>Product Name</b>	Staurosporine Small Molecule
<b>Unit Size</b>	1mg
<b>Description</b>	Protein kinase inhibitor
<b>Purity</b>	>98%

## Technical Data

<b>Alternative Name(s)</b>	(2S,3R,4R,6R)-3-Methoxy-2-methyl-4-(methylamino)-29-oxa-1,7,17-triazaoctacyclo[12.12.2.12,6.07,28.08,13.015,19.020,27.021,26]nonacosa-8,10,12,14,19,21,23,25,27-nonaen-16-one
<b>Formula</b>	C <sub>28</sub> H <sub>26</sub> N <sub>4</sub> O <sub>3</sub>
<b>CAS#</b>	62996-74-1
<b>Molecular Weight</b>	466.54
<b>Chemical Structure</b>	 <p>The chemical structure of Staurosporine is a complex polycyclic molecule. It features a central pentacyclic core consisting of a benzene ring fused to a pyrrole ring, which is further fused to a five-membered ring containing a nitrogen atom and a carbonyl group. This core is substituted with two indole rings at the 2 and 6 positions. A side chain is attached to the 3-position of the indole ring, containing a methylamino group (-NHMe) and a methoxy group (-OMe). The side chain is also linked to a bicyclic system that includes a nitrogen atom and a methyl group.</p>
<b>Solubility</b>	Soluble to 50mM in DMSO
<b>Source</b>	Synthetic
<b>Appearance</b>	Pale Yellow Solid
<b>Storage Conditions</b>	-20°C; 1 year+
<b>Shipping Temperature</b>	Shipped Ambient
<b>SMILES</b>	<chem>C[C@@]12[C@@H]([C@@H]([C@@H](O1)N3C4=CC=CC=C4C5=C6C(=C7C8=CC=CC=C8N2C7=C53)CNC6=O)NC)OC</chem>
<b>Research Area(s)</b>	Apoptosis

## Biological Description

<b>Function</b>	<p>Staurosporine is a broad spectrum protein kinase inhibitor with activities ranging from anti-fungal to anti-hypertensive (1). Staurosporine is a typical ATP-competitive kinase inhibitor that binds to many kinases with high affinity, but with little selectivity (2).</p> <ol style="list-style-type: none"><li>1. Ruegg U.T., and Burgess G.M. (1989) Trends in Pharm Science. 10(6): 218-220.</li><li>2. Karaman M.W., et al. (2008) Nat. Biotechnol. 26(1): 127-132.</li></ol>
<b>Product Citations</b>	PubMed ID: N/A

# Material Safety Data Sheet

## Staurosporine SIH-253-1MG

This product is for *in vitro* research use only and is not intended for use in humans or animals

The below information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. StressMarq 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 Catalogue for additional terms and conditions of sale.

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### Regulatory Information

Classification: Caution: Substance not yet fully tested.

Safety Phrases:

S22 - Do not breathe dust

S24/25 - Avoid contact with skin and eyes

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection

Hazard Phrases:

H340- H350

Precautionary Phrases:

P201-P308 + P313

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### Physical Data

This product consists of powder, shipped at ambient temperatures. The physical properties of this product have not been investigated thoroughly. CAS Number: 62996-74-1

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### Fire and Explosion Hazard and Reactivity Data

NOT APPLICABLE

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### Toxicological Properties

May be harmful by inhalation, ingestion, or skin absorption. The toxicological properties of this product have not been investigated thoroughly. Exercise due caution.

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### Preventative Measures

Wear chemical safety goggles and compatible chemical-resistant gloves. Avoid inhalation, contact with eyes, skin or clothing.

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### Spill and Leak Procedures

Observe all federal, state and local environmental regulations.

- Wear protective equipment.
- Absorb on sand or vermiculite and place in closed containers for disposal.
- Dispose or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

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### First Aid Measures

- If swallowed, wash out mouth with water, provided person is conscious. Call a physician.
- In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. If a rash or other irritation develops, call a physician.
- If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.
- In case of eye contact, flush with copious amounts of water for at least 15 minutes while separating the eyelids with fingers. Call a physician.