

**Product Name:** Staurosporine

**Catalog No.:** 1285

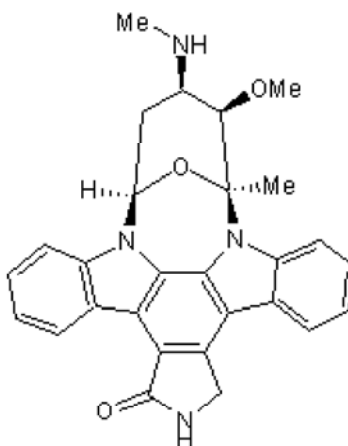
**Batch No.:** 5

CAS Number: 62996-74-1

IUPAC Name: [9*S*-(9 $\alpha$ ,10 $\beta$ ,11 $\beta$ ,13 $\alpha$ )]-2,3,10,11,12,13-Hexahydro-10-methoxy-9-methyl-11-(methylamino)-9,13-epoxy-1*H*,9*H*-diindolo[1,2,3-*gh*:3',2',1'-*lm*]pyrrolo[3,4-*j*][1,7]benzodiazonin-1-one

## 1. PHYSICAL AND CHEMICAL PROPERTIES

<b>Batch Molecular Formula:</b>	C <sub>28</sub> H <sub>26</sub> N <sub>4</sub> O <sub>3</sub>
<b>Batch Molecular Weight:</b>	466.54
<b>Physical Appearance:</b>	Beige solid
<b>Solubility:</b>	DMSO to 50 mM
<b>Storage:</b>	Store at -20°C
<b>Batch Molecular Structure:</b>	



## 2. ANALYTICAL DATA

<b>HPLC:</b>	Shows 98.9% purity
<b><sup>1</sup>H NMR:</b>	Consistent with structure
<b>Mass Spectrum:</b>	Consistent with structure

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

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**Description:**

Broad spectrum protein kinase inhibitor. Enzymes inhibited include protein kinase C (IC<sub>50</sub> = 3 nM), protein kinase A (IC<sub>50</sub> = 7 nM), p<sup>60v-src</sup> tyrosine protein kinase (IC<sub>50</sub> = 6 nM) and CaM kinase II (IC<sub>50</sub> = 20 nM). Also enhances efficiency of lentiviral transduction of human hematopoietic stem and progenitor cells by 2-fold.

**Physical and Chemical Properties:**

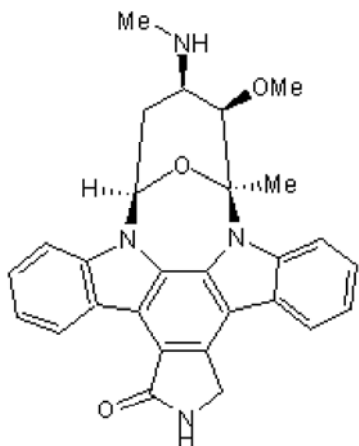
Batch Molecular Formula: C<sub>28</sub>H<sub>26</sub>N<sub>4</sub>O<sub>3</sub>

Batch Molecular Weight: 466.54

Physical Appearance: Beige solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**References:**

**Lewis et al** (2018) Staurosporine increases lentiviral vector transduction efficiency of human hematopoietic stem and progenitor cells. *Mol. Ther. Methods Clin. Dev.* **9** 313. PMID: 30038935.

**Yanagihara et al** (1991) Staurosporine: an effective inhibitor for Ca<sup>2+</sup>/calmodulin-dependent protein kinase II. *J. Neurochem.* **56** 294. PMID: 1846174.

**Ruegg and Burgess** (1989) Staurosporine, K-252 and UCN-01: potent but nonspecific inhibitors of protein kinases. *TiPS* **10** 218. PMID: 2672462.

**Storage:** Store at -20°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 50 mM

This product is supplied as a lyophilized solid and may 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. 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.

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