

Product Name: Staurosporine

Catalog No.: 1285

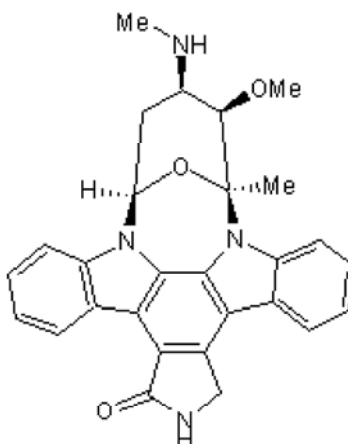
Batch No.: 5

CAS Number: 62996-74-1

IUPAC Name: [9*S*-(9 α ,10 β ,11 β ,13 α)]-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

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



2. ANALYTICAL DATA

HPLC:	Shows 98.9% purity
¹H NMR:	Consistent with structure
Mass Spectrum:	Consistent with structure

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

Product Name: Staurosporine

Catalog No.: 1285

Batch No.: 5

CAS Number: 62996-74-1

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

Description:

Staurosporine is a broad spectrum protein kinase inhibitor. Enzymes inhibited include protein kinase C, p^{60v-src} tyrosine protein kinase, protein kinase A, and CaM kinase II (IC₅₀ values are 3nM, 6 nM, 7 nM and 20 nM, respectively). Staurosporine reduces nuclear myosin heavy chain 9 phosphorylation which inhibits gastric cancer cell progression in transgenic mouse models. Staurosporine inhibits cell viability and promotes apoptosis in oral and pancreatic cancer cells. Staurosporine also enhances efficiency of lentiviral transduction of human hematopoietic stem and progenitor cells by 2-fold, induces dopaminergic axonal outgrowth in vitro and ... Please see product specific page on www.tocris.com for full description.

Physical and Chemical Properties:

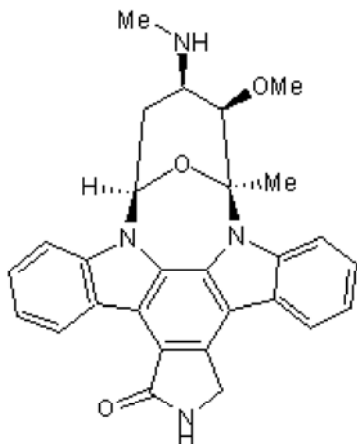
Batch Molecular Formula: C₂₈H₂₆N₄O₃

Batch Molecular Weight: 466.54

Physical Appearance: Beige solid

Minimum Purity: ≥98%

Batch Molecular Structure:



References:

Ye et al (2020) Nuclear MYH9-induced CTNNB1 transcription, targeted by staurosporin, promotes gastric cancer cell anoikis resistance and metastasis. *Theranostics* **10** 7545. PMID: 32685004.

Malsy et al (2019) Staurosporine induces apoptosis in pancreatic carcinoma cells PaTu 8988t and Panc-1 via the intrinsic signaling pathway. *Eur.J.Med.Res.* **24** 5. PMID: 30686270.

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.

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.

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

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel:+1 612 379 2956