

## PRODUCT DATA SHEET

Stauprimide Code: BIA-S1226

Pack size: **0.5 mg, 2.5 mg** 

Synonyms: N-Benzoyl-7-oxostaurosporine

## Specifications

CAS # : 154589-96-5 Molecular Formula :  $C_{35}H_{28}N_4O_5$ 

Molecular Weight : 584.6

Source : Streptomyces sp. MST-AS5345, semi-synthetic

Appearance : Yellow orange solid
Purity : > 95% by HPLC

Long Term Storage : - 20 °C

Solubility : Soluble in methanol, ethanol, DMF or DMSO

## Application Notes

Stauprimide is a semi-synthetic analogue of the staurosporine family of indolocarbazoles. Stauprimide was first published in 1994 as part of an extensive structure-activity investigation to improve the selective inhibition of protein kinase C as a potential antitumor agent. More recently, stauprimide has been shown to increase the efficiency of the directed differentiation of mouse and human embyronic stem cells in synergy with defined extracellular signalling cues. Stauprimide interacts with NME2 (PUF) transcription factor to down-regulate c-Myc expression, leading to differentiation of stem cells.

## References

1. Inhibitory activity and selectivity of staurosporine derivatives towards protein kinase C. Caravatti G. et al., Bioorg. Med. Chem. Letters 1994, 4, 399.

2. A small molecule primes embryonic stem cells for differentiation. Zhu S. et al., Cell Stem Cell 2009, 4, 416