

## Small Molecules

### Stauprimide

Inhibitor of NME2 localization;  
Suppresses c-MYC expression

Catalog # 72652

1 mg



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## Product Description

Stauprimide specifically inhibits the nuclear localization of NME2, which results in the suppression of c-MYC—a key regulator of pluripotency—thereby priming cells for differentiation (Zhu et al.).

**Molecular Name:** Stauprimide

**Alternative Names:** N-Benzoyl-7-oxo Staurosporine

**CAS Number:** 154589-96-5

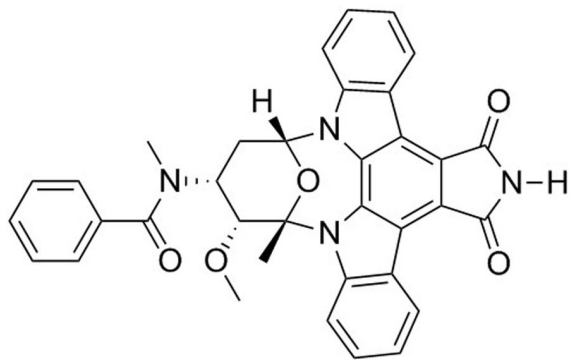
**Chemical Formula:** C<sub>35</sub>H<sub>28</sub>N<sub>4</sub>O<sub>5</sub>

**Molecular Weight:** 584.6 g/mol

**Purity:** ≥ 98%

**Chemical Name:** N-[(9S,10R,11R,13R)-2,3,10,11,12,13-hexahydro-10-methoxy-9-methyl-1,3-dioxo-9,13-epoxy-1H,9H-diindolo[1,2,3-gh:3',2',1'-lm]pyrrolo[3,4-j][1,7]benzodiazonin-11-yl]-N-methyl-benzamide

**Structure:**



## Properties

**Physical Appearance:** A crystalline solid

**Storage:** Product stable at -20°C as supplied. Protect from prolonged exposure to light.  
Stable as supplied for 12 months from date of receipt.

**Solubility:** · DMSO ≤ 15 mM  
· Absolute ethanol ≤ 340 μM  
For example, to prepare a 10 mM stock solution in DMSO, resuspend 1 mg in 171 μL of DMSO.

Prepare stock solution fresh before use. Information regarding stability of small molecules in solution has rarely been reported, however, as a general guide we recommend storage in DMSO at -20°C. Aliquot into working volumes to avoid repeated freeze-thaw cycles. The effect of storage of stock solution on compound performance should be tested for each application.

Compound has low solubility in aqueous media. For use as a cell culture supplement, stock solution should be diluted into culture medium immediately before use. Avoid final DMSO concentration above 0.1% due to potential cell toxicity.

## Published Applications

### DIFFERENTIATION

- Enhances cytokine-mediated directed differentiation of mouse and human pluripotent stem cells to multiple lineages, including definitive endoderm, neural progenitor cells, and mesodermal derivatives such as cardiomyocytes (Zhu et al.; Tahamtani et al.).

## References

Tahamtani Y et al. (2014) Stauprimide priming of human embryonic stem cells toward definitive endoderm. *Cell J* 16(1): 63–72.

Zhu S et al. (2009) A small molecule primes embryonic stem cells for differentiation. *Cell Stem Cell* 4(5): 416–26.

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