

**Product Name:** CEP 1347

**Catalog No.:** 4924

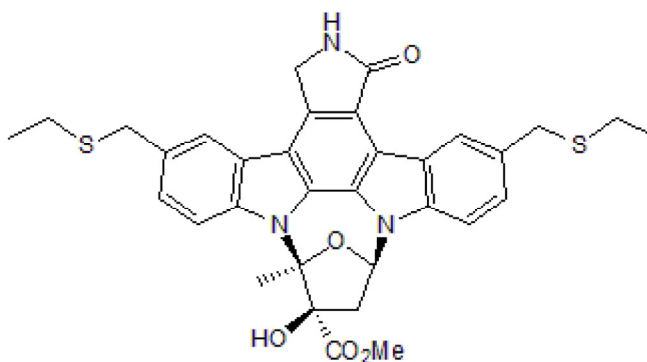
**Batch No.:** 5

CAS Number: 156177-65-0

IUPAC Name: (9*S*,10*R*,12*R*)-5-16-Bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-9,12-epoxy-1*H*-diindolo[1,2,3-*fg*:3',2',1'-*k'*]pyrrolo[3,4-*l*][1,6]benzodiazocine-10-carboxylic acid methyl ester

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>33</sub>H<sub>33</sub>N<sub>3</sub>O<sub>5</sub>S<sub>2</sub>  
**Batch Molecular Weight:** 615.76  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 10 mM  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**TLC:** R<sub>f</sub> = 0.7 (Dichloromethane:Methanol [9:1])  
**HPLC:** Shows 98.5% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

|             | Carbon | Hydrogen | Nitrogen |
|-------------|--------|----------|----------|
| Theoretical | 64.37  | 5.4      | 6.82     |
| Found       | 64.1   | 5.33     | 6.95     |

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

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**Description:**

CEP 1347 is a potent inhibitor of mixed lineage kinases MLK3, MLK1 and MLK2 (IC<sub>50</sub> values in vitro are 23-39 nM, 38-61 nM and 51-82 nM, respectively), and blocks downstream c-jun N-terminal kinase (JNK) activation (IC<sub>50</sub> = 20 nM). CEP 1347 rescues motor neurons undergoing apoptosis (EC<sub>50</sub> = 20 nM), blocks Aβ-induced cortical neuron apoptosis (EC<sub>50</sub> ~51 nM) and, in an animal model of Huntington's disease, restores BDNF mRNA to wild type levels. CEP 1347 is also a MDM4 inhibitor. It displays inhibition of malignant meningioma cells growth in vitro, and shows anti-tumor activity in a mouse xenograft model of meningioma in vivo. CEP 1347 is... Please see product specific page on www.tocris.com for full description.

**Physical and Chemical Properties:**

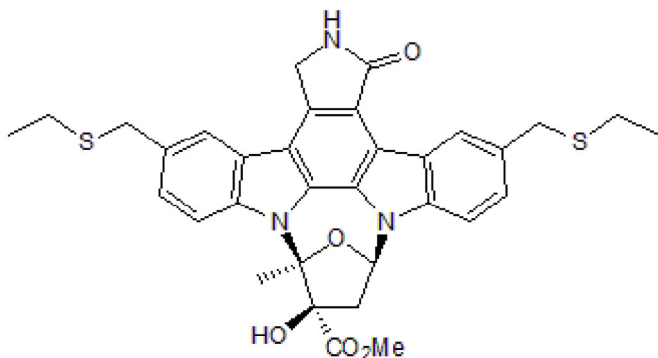
Batch Molecular Formula: C<sub>33</sub>H<sub>33</sub>N<sub>3</sub>O<sub>5</sub>S<sub>2</sub>

Batch Molecular Weight: 615.76

Physical Appearance: White solid

**Minimum Purity:** ≥97%

**Batch Molecular Structure:**



**References:**

**Mitobe et al (2023)** The novel MDM4 inhibitor CEP-1347 activates the p53 pathway and blocks malignant meningioma growth *in vitro* and *in vivo*. *Biomedicines* **11** 1967. PMID: 11071967.

**Conforti et al (2008)** Blood level of brain-derived neurotrophic factor mRNA is progressively reduced in rodent models of Huntington's disease: Restoration by the neuroprotective compound CEP-1347. *Mol.Cell.Neurosci.* **39** 1. PMID: 18571429.

**Bozyczko-Coyne et al (2001)** CEP-1347/KT-7515, an inhibitor of SAPK/JNK pathway activation, promotes survival and blocks multiple events associated with Abeta-induced cortical neuron apoptosis. *J.Neurochem.* **77** 849. PMID: 11331414.

**Storage:** Store at -20°C. This product is packaged under an inert atmosphere.

**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 10 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. \*Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

**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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