

**Product Name:** SP 141

**Catalog No.:** 5332

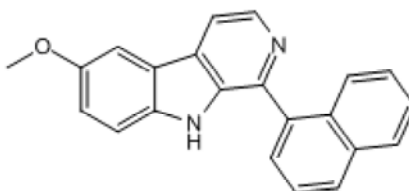
**Batch No.:** 1

CAS Number: 1253491-42-7

IUPAC Name: 6-Methoxy-1-(1-naphthalenyl)-9H-pyrido[3,4-b]indole

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>22</sub>H<sub>16</sub>N<sub>2</sub>O  
**Batch Molecular Weight:** 324.38  
**Physical Appearance:** Light brown solid  
**Solubility:** DMSO to 100 mM  
 ethanol to 100 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**TLC:** R<sub>f</sub> = 0.4 (Dichloromethane:Methanol [19:1])  
**HPLC:** Shows 98.3% purity  
<sup>1</sup>H NMR: Consistent with structure  
 Mass Spectrum: Consistent with structure  
 Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	81.46	4.97	8.64
Found	81.17	5.22	8.26

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

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**Description:**

SP 141 is a high affinity MDM2 inhibitor ( $K_i = 28$  nM); directly binds MDM2. SP 141 inhibits MDM2 expression and induces MDM2 autoubiquitination and proteasomal degradation. SP 141 attenuates growth of breast cancer xenograft tumors. SP 141 impairs liposarcoma growth in vitro and in human xenograft models. SP 141 is cell permeable.

**Physical and Chemical Properties:**

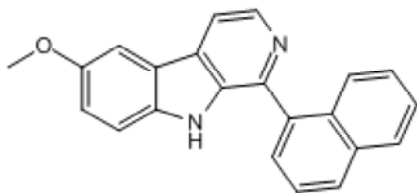
Batch Molecular Formula:  $C_{22}H_{16}N_2O$

Batch Molecular Weight: 324.38

Physical Appearance: Light brown solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**References:**

**Wang et al** (2014) The pyrido[b]indole MDM2 inhibitor SP-141 exerts potent therapeutic effects in breast cancer models. *Nat. Commun.* **5** 5086. PMID: 25271708.

**Storage:** Store at +4°C

**Solubility & Usage Info:**

DMSO to 100 mM

ethanol to 100 mM

**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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