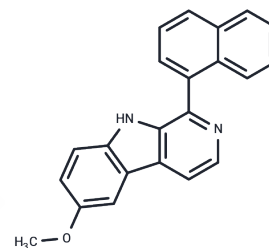


SP-141

## Chemical Properties

CAS No. : 1253491-42-7  
 Formula: C<sub>22</sub>H<sub>16</sub>N<sub>2</sub>O  
 Molecular Weight: 324.38  
 Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year  
*Actual storage temperature shall be subject to the COA.*



## Biological Description

Description	SP 141 is a MDM2 inhibitor.SP-141 promotes MDM2 auto-ubiquitination and degradation, with anticancer activity.
Targets(IC50)	Mdm2,MDM-2/p53
In vitro	SP141, which bound directly to MDM2, promoting its auto-ubiquitination and degradation by the proteasome.?The compound reduced levels of MDM2 in pancreatic cancer cell lines, as well as their proliferation, with 50% inhibitory concentrations <0.5 μM (0.38-0.50 μM).?Increasing concentrations of SP141 induced increasing levels of apoptosis and G2-M-phase arrest of pancreatic cancer cell lines, whether or not they expressed functional P53[1].
In vivo	Injection of nude mice with SP141 (40 mg/kg/d) inhibited growth of xenograft tumors (by 75% compared with control mice), and led to regression of orthotopic tumors[1].

## Solubility Information

Solubility	DMSO: 4.4 mg/mL (13.56 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 1 mg/mL (3.08 mM),Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	3.0828 mL	15.414 mL	30.828 mL
5 mM	0.6166 mL	3.0828 mL	6.1656 mL
10 mM	0.3083 mL	1.5414 mL	3.0828 mL
50 mM	0.0617 mL	0.3083 mL	0.6166 mL

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Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Wei Wang, et al. The Pyrido[b]indole MDM2 Inhibitor SP-141 Exerts Potent Therapeutic Effects in Breast Cancer Models. *Nat Commun.* 2014 Oct 1;5:5086.

Wei Wang, et al. Identification of a New Class of MDM2 Inhibitor That Inhibits Growth of Orthotopic Pancreatic Tumors in Mice. *Gastroenterology.* 2014 Oct;147(4):893-902.e2.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

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Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481