

# Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten! See the following pages for more information!



# Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

# Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

# SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic in





# **Product** Data Sheet

### Siremadlin

Cat. No.: HY-18658 
CAS No.: 1448867-41-1 
Molecular Formula:  $C_{26}H_{24}Cl_2N_6O_4$ 

Molecular Weight: 555.41

Target: MDM-2/p53; E1/E2/E3 Enzyme

Pathway: Apoptosis; Metabolic Enzyme/Protease

Storage: Powder -20°C 3 years

4°C 2 years

In solvent -80°C 2 years

-20°C 1 year

#### **SOLVENT & SOLUBILITY**

In Vitro DMSO : ≥ 56.75 mg/mL (102.18 mM)

\* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	1.8005 mL	9.0024 mL	18.0047 mL
	5 mM	0.3601 mL	1.8005 mL	3.6009 mL
	10 mM	0.1800 mL	0.9002 mL	1.8005 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility:  $\geq$  2.5 mg/mL (4.50 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (4.50 mM); Clear solution
- 3. Add each solvent one by one: 5% DMSO >> 40% PEG300 >> 5% Tween-80 >> 50% saline Solubility:  $\geq$  2.5 mg/mL (4.50 mM); Clear solution

### **BIOLOGICAL ACTIVITY**

Description	Siremadlin (NVP-HDM201) is a potent, orally bioavailable and highly specific p53-MDM2 interaction inhibitor.
In Vitro	Siremadlin (NVP-HDM201) disrupts both human and murine TP53- MDM2 interactions, with nanomolar cellular IC <sub>50</sub> values, blocking TP53 degradation <sup>[1]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.

#### In Vivo

Siremadlin (NVP-HDM201) is an imidazolopyrrolidinone analogue, showing a very advantageous in vivo profile. NVP-HDM201 has recently entered Phase 1 clinical trials in cancer patients<sup>[2]</sup>. Constitutive PB mutagenesis in Arf<sup>-/-</sup> mice provides a collection of spontaneous tumors with characterized insertional genetic landscapes. Tumors are allografted in large cohorts of mice to assess the pharmacologic effects of Siremadlin (NVP-HDM201). Sixteen out of 21 allograft models are sensitive to Siremadlin (NVP-HDM201) but ultimately relapse under treatment. A comparison of tumors with acquired resistance to Siremadlin (NVP-HDM201) and untreated tumors identified 87 genes that are differentially and significantly targeted by the PB transposon<sup>[1]</sup>. Siremadlin (NVP-HDM201) administered either daily at a low dose or once at a high dose revealed a differentiated engagement of the p53 molecular response. In contrast to the daily low dose treatment regimen, the single high dose Siremadlin (NVP-HDM201) regimen results in a rapid and dramatic induction of p53-dependent PUMA expression and apoptosis. This is consistent with the finding that a single high dose Siremadlin (NVP-HDM201) treatment, administered orally or intravenously, results in a robust and sustained tumor regression. Overall, both daily and once every 3 weeks dosing regimen shows comparable long term efficacy in preclinical studies. The ongoing clinical trial is currently designed to compare both dosing regimens with regard to efficacy and tolerability<sup>[3]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

#### **CUSTOMER VALIDATION**

- Oncogenesis. 2022 Jul 2;11(1):37.
- Int J Mol Sci. 2022, 23(19), 11939.
- Cancers (Basel). 2022 Oct 19;14(20):5127.
- SSRN, 2023 Oct 9.

See more customer validations on www.MedChemExpress.com

#### **REFERENCES**

- [1]. Chapeau EA, et al. Resistance mechanisms to TP53-MDM2 inhibition identified by in vivo piggyBac transposon mutagenesis screen in an Arf-/- mouse model. Proc Natl Acad Sci U S A. 2017 Mar 21;114(12):3151-3156.
- [2]. Furet P, et al. Discovery of a novel class of highly potent inhibitors of the p53-MDM2 interaction by structure-based design starting from a conformational argument. Bioorg Med Chem Lett. 2016 Oct 1;26(19):4837-41.
- [3]. Stéphane F, et al. Abstract 1224: Insights into the mechanism of action of NVP-HDM201, a differentiated and versatile Next-Generation small-molecule inhibitor of Mdm2, under evaluation in phase I clinical trials. Insights into the mechanism of action of N

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA