# **Certificate of Analysis**

# www.tocris.com

Catalog No.: 7026

### Product Name: Veliparib dihydrochloride

CAS Number: 912445-05-7

TOCRIS

a biotechne

IUPAC Name: 2-[(2R)-2-Methyl-2-pyrrolidinyl]-1H-benzimidazole-4-carboxamide dihydrochloride

## 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: Batch Molecular Weight: Physical Appearance: Solubility:

Storage: Batch Molecular Structure: C<sub>13</sub>H<sub>16</sub>N<sub>4</sub>O.2HCI.<sup>1</sup>/<sub>4</sub>H<sub>2</sub>O 321.71 Off-white solid DMSO to 100 mM water to 100 mM Store at -20°C

H<sub>2</sub>N 2HCI

## 2. ANALYTICAL DATA

HPLC:	Shows 98.6% purity			
<sup>1</sup> H NMR:	Consistent with structure			
Mass Spectrum:	Consistent with structure			
Optical Rotation:	$[\alpha]_D$ = +14.7 (Concentration = 1, Solvent = Methanol)			
Microanalysis:	Carbon Hydrogen Nitrogen			
	Theoretical 48.53 5.8 17.41			

Found

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48.57

5.39

17.37

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Batch No.: 1

# TOCRIS a biotechne brand

# **Product Information**

# www.tocris.com

Print Date: Dec 5th 2019

### Product Name: Veliparib dihydrochloride

CAS Number: 912445-05-7

IUPAC Name: 2-[(2*R*)-2-Methyl-2-pyrrolidinyl]-1*H*-benzimidazole-4-carboxamide dihydrochloride

### **Description:**

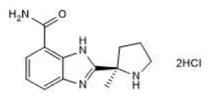
High affinity PARP-2 and PARP-1 inhibitor (K<sub>i</sub> values are 2.9 and 5.2 nM, respectively). Inhibits repair of radiation-induced DNA damage and sensitizes lung cancer cells to radiation. Also increases autophagy and apoptosis in lung cancer cells. Enhances radiation-induced tumor growth delay in mice bearing lung tumor xenografts. Also chemosensitizer. Potentiates effects of temozolomide (Cat. No. 2706) in a mouse melanoma model. Orally bioavailable and brain penetrant.

### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>13</sub>H<sub>16</sub>N<sub>4</sub>O.2HCl.¼H<sub>2</sub>O Batch Molecular Weight: 321.71 Physical Appearance: Off-white solid

Minimum Purity: >98%

**Batch Molecular Structure:** 



### **Storage:** Store at -20°C

Solubility & Usage Info: DMSO to 100 mM

water 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.

#### **References:**

Albert et al (2007) Inhibition of poly(ADP-ribose) polymerase enhances cell death and improves tumor growth delay in irradiated lung cancer models. Clin.Cancer Res. **13** 3033. PMID: 17505006.

**Donawho** et al (2007) ABT-888, an orally active poly(ADP-ribose) polymerase inhibitor that potentiates DNA-damaging agents in preclinical tumor models. Clin.Cancer Res. **13** 2728. PMID: 17473206.

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