

# Veliparib (dihydrochloride)

Catalog No: tcsc0077



## Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg

**Size:** 200mg

**Size:** 500mg

**Size:** 1g



## Specifications

**CAS No:**

912445-05-7

**Formula:**

$C_{13}H_{18}Cl_2N_4O$

**Pathway:**

Epigenetics;Cell Cycle/DNA Damage;Autophagy

**Target:**

PARP;PARP;Autophagy

**Purity / Grade:**

>98%

**Solubility:**

DMSO :  $\geq 3.2$  mg/mL (10.09 mM); H<sub>2</sub>O :  $\geq 50$  mg/mL (157.62 mM)

**Alternative Names:**

ABT-888 dihydrochloride

**Observed Molecular Weight:**

317.21

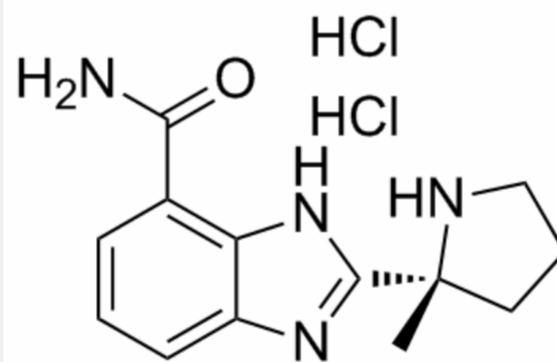
**Product Description**

Veliparib (dihydrochloride) is a potent inhibitor of **PARP1** and **PARP2** with  $K_i$  of 5.2 nM and 2.9 nM in cell-free assays, respectively.

IC50 & Target:  $K_i$ : 5.2 nM (PARP1), 2.9 nM (PARP2)<sup>[1]</sup>

**In Vitro:** Veliparib is inactive to SIRT2 ( $>5 \mu\text{M}$ )<sup>[1]</sup>. Veliparib inhibits the PARP activity with  $EC_{50}$  of 2 nM in C41 cells<sup>[2]</sup>. Veliparib can decrease the PAR levels in both irradiated and nonirradiated H460 cells. Veliparib reduces clonogenic survival and inhibits DNA repair by PARP-1 inhibition in H460 cells. Veliparib increases apoptosis and autophagy in H460 cells when combination with radiation<sup>[3]</sup>. Veliparib inhibits PARP activity in H1299, DU145 and 22RV1 cells and the inhibition is independent of p53 function. Veliparib (10  $\mu\text{M}$ ) suppresses the surviving fraction (SF) by 43% in the clonogenic H1299 cells. Veliparib shows effective radiosensitivity in oxic H1299 cells. Veliparib can attenuate the SF of hypoxic-irradiated cells including H1299, DU145 and 22RV1<sup>[4]</sup>.

**In Vivo:** The oral bioavailability of Veliparib is 56%-92% in mice, SD rats, beagle dogs, and cynomolgus monkeys after oral administration<sup>[1]</sup>. Veliparib (25 mg/kg, i.p.) can improve tumor growth delay in a NCI-H460 xenograft model. Combination with radiation, veliparib decreases the tumor vessel formation<sup>[3]</sup>. Veliparib reduces intratumor PAR levels by more than 95% at a dose of 3 and 12.5 mg/kg in A375 and Colo829 xenograft models and the suppression can be maintained over time<sup>[4]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!