

# Olaparib

**Catalog No: tcsc0075**



## Available Sizes

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg

**Size:** 200mg

**Size:** 500mg

**Size:** 1g

**Size:** 2g

**Size:** 5g

**Size:** 10g



## Specifications

**CAS No:**

763113-22-0

**Formula:**

$C_{24}H_{23}FN_4O_3$

**Pathway:**

Epigenetics;Cell Cycle/DNA Damage;Autophagy;Autophagy

**Target:**

PARP;PARP;Autophagy;Mitophagy

**Purity / Grade:**

>98%

**Solubility:**

DMSO :  $\geq 33.33$  mg/mL (76.72 mM)

**Storage Instruction:**

Powder <br> -20°C 3 years <br> 4°C 2 years <br> In solvent <br> -80°C 6 months <br> -20°C 1 month

**Alternative Names:**

AZD2281;KU0059436

**Observed Molecular Weight:**

434.46

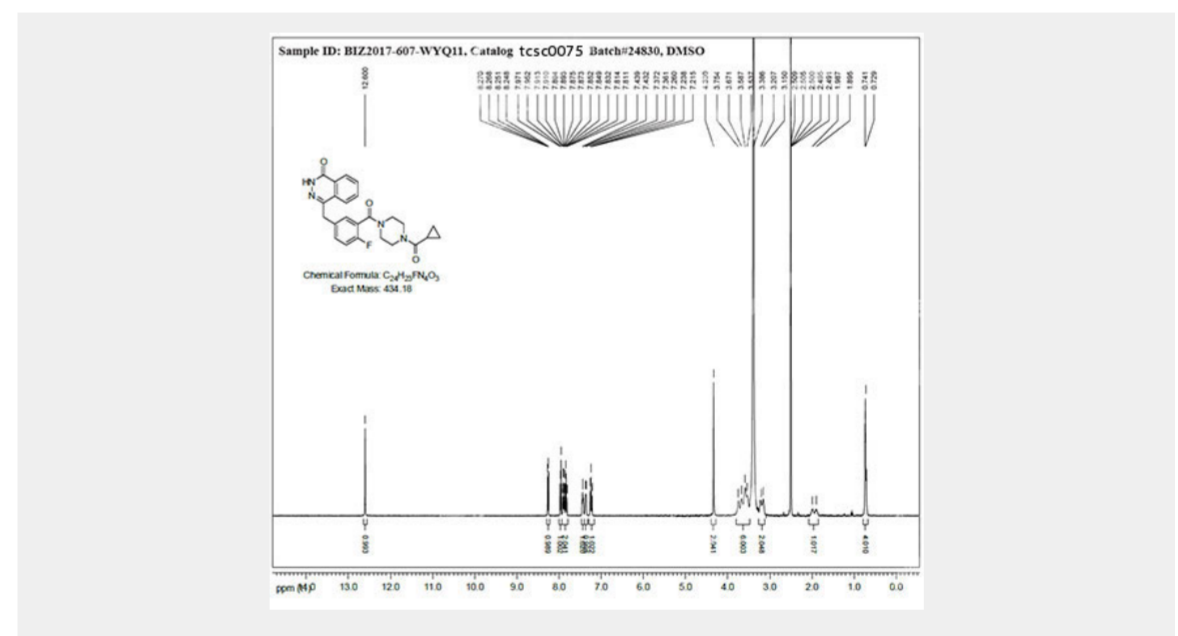
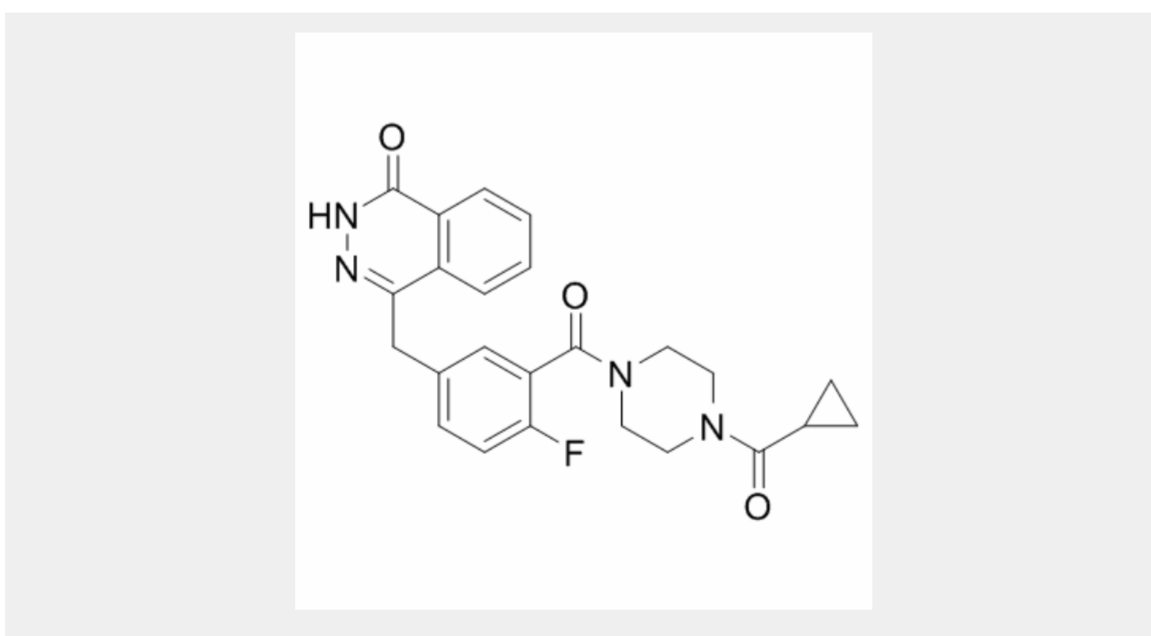
**Product Description**

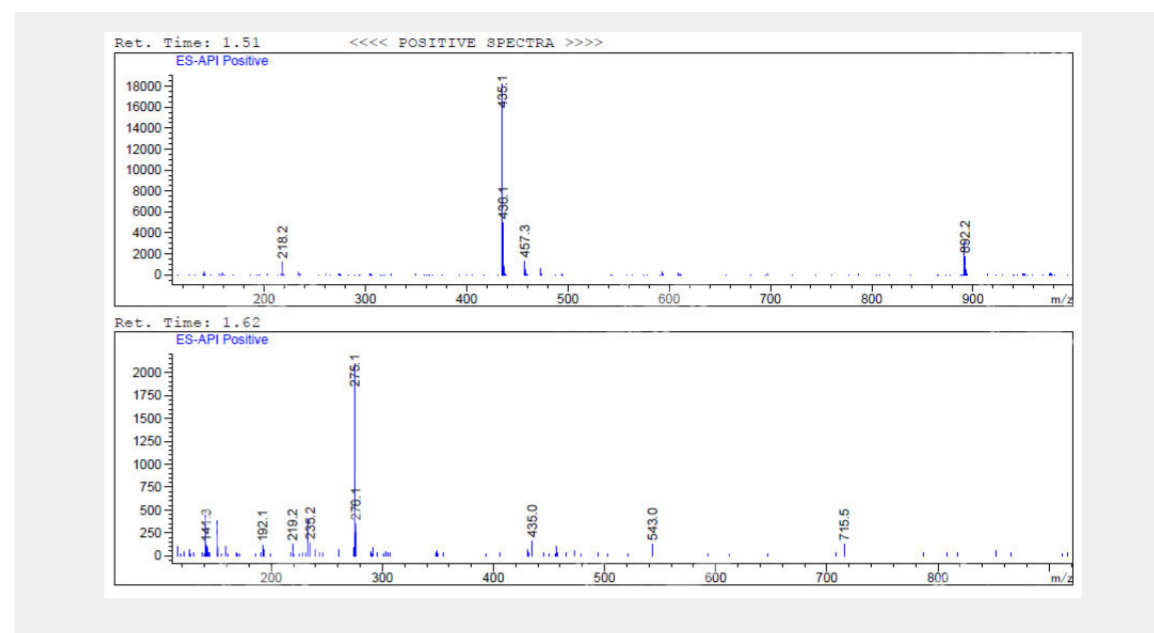
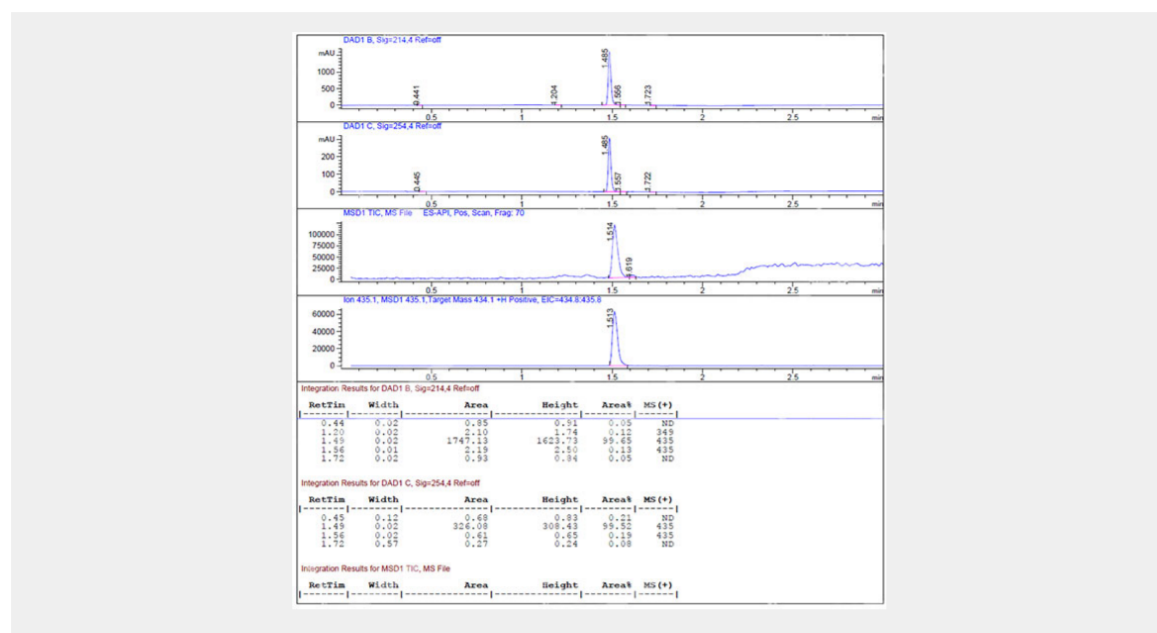
Olaparib (AZD2281;KU0059436) is a potent and oral **PARP** inhibitor with **IC<sub>50</sub>**s of 5 and 1 nM for **PARP1** and **PARP2**, respectively.

IC50 & Target: IC50: 5/1 nM (PARP-1/2)<sup>[1]</sup>

**In Vitro:** Olaparib (AZD2281) is a single digit nanomolar inhibitor of both PARP-1 and PARP-2 that shows standalone activity against BRCA1-deficient breast cancer cell lines. Olaparib is applied to SW620 cell lysates, and identified the IC<sub>50</sub> for PARP-1 inhibition to be around 6 nM and the total ablation of PARP-1 activity to be at concentrations of 30–100 nM<sup>[1]</sup>.

**In Vivo:** Animals bearing SW620 xenografted tumors are treated with Olaparib (10 mg/kg, p.o.) in combination with Temozolomide (TMZ) (50 mg/kg, p.o.) once daily for 5 consecutive days, after which the tumors are left to grow out<sup>[1]</sup>. Olaparib increases vascular perfusion in Calu-6 tumors established in a DWC model. Administration of olaparib(50 mg/kg, p.o.) as a single agent (top panel) or in combination with radiation (bottom panel) results in an increase in fluorescence intensity in the Calu-6 tumors<sup>[2]</sup>.





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