

Product Name: Olaparib

Catalog No.: 7579

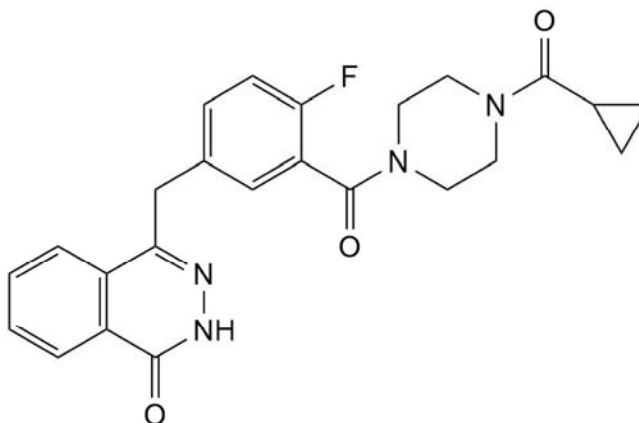
Batch No.: 1

CAS Number: 763113-22-0

IUPAC Name: 4-[[3-[[4-(Cyclopropylcarbonyl)-1-piperazinyl]carbonyl]-4-fluorophenyl]methyl]-1(2H)-phthalazinone

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₄H₂₃FN₄O₃·¼H₂O
Batch Molecular Weight: 438.97
Physical Appearance: White solid
Solubility: ethanol to 5 mM with gentle warming
 DMSO to 100 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.8% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	65.67	5.4	12.76
Found	65.44	5.31	12.59

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

Product Name: Olaparib

Catalog No.: 7579

Batch No.: 1

CAS Number: 763113-22-0

IUPAC Name: 4-[[3-[[4-(Cyclopropylcarbonyl)-1-piperazinyl]carbonyl]-4-fluorophenyl]methyl]-1(2H)-phthalazinone

Description:

Olaparib is a potent PARP2 and PARP1 inhibitor (IC₅₀ values are 1 and 5 nM, respectively). Olaparib abolishes PARP-1 activity at a concentration of 30-100 nM in SW620 cell lysates. BRCA1-deficient cell lines are hypersensitive to PARP inhibition by Olaparib in comparison with BRCA1- and BRCA2-proficient cells. Olaparib potentiates the antitumor activity of the methylating chemotherapeutic agent Temozolomide (Cat. No. 2706) in xenograft mouse model. Olaparib is orally bioavailable in rats.

Physical and Chemical Properties:

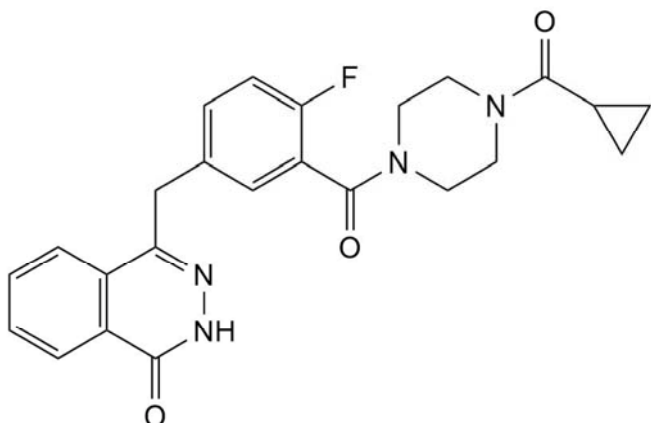
Batch Molecular Formula: C₂₄H₂₃FN₄O₃·½H₂O

Batch Molecular Weight: 438.97

Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

ethanol to 5 mM with gentle warming
DMSO 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:

Raimundo et al (2021) BBIT20 inhibits homologous DNA repair with disruption of the BRCA1-BARD1 interaction in breast and ovarian cancer. *Br.J.Pharmacol.* **178** 3627. PMID: 33899955.

Menear et al (2008) 4-[3-(4-cyclopropanecarbonylpiperazine-1-carbonyl)-4-fluorobenzyl]-2H-phthalazin-1-one: a novel bioavailable inhibitor of poly(ADP-ribose) polymerase-1. *J.Med.Chem.* **51** 6581. PMID: 18800822.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel:+1 612 379 2956