## **Product Specification Sheet**

Product Name: AZD2281 (Olaparib)

Catalog Number: C2228

**Technical information:** 

Chemical Formula: C<sub>24</sub>H<sub>23</sub>FN<sub>4</sub>O<sub>3</sub>

CAS #: 763113-22-0, 937799-91-2

Molecular Weight: 434.46

Purity: > 98%
Appearance: White solid

Solubility: Soluble in DMSO up to 100 mM

Chemical Name: 4-(3-(1-(cyclopropanecarbonyl)piperazine-4-carbonyl)-4-fluorobenzyl)phthalazin-1(2H)-one

Storage: Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.

Shelf Life: In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months

under proper storage condition.

Handling: • To make 10 mM stock solution, add 0.23mL of DMSO for each mg of AZD2281 (Olaparib)

• For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum

sample recovery.

Biological Activity: AZD2281 (olaparib) is phthalazinone-based PARP inhibitor with a potencies of 5 nM and 1 nM for

PARP1 and PARP2, respectively. It has been shown to be efficacious in the treatment of breast cancer tumors with BRCA mutations. Specifically, BRCA2 deficient tumor cells showed the strongest differential growth inhibition upon treatment with AZD2281 when compared to BRCA2-

proficient cells. [1]

AZD2281 has been studied in combination therapies with platinum-based drugs and taxanes; specifically, synergistic toxicity in BRCA2-deficient cells has been shown with cisplatin. [1] AZD2281 has been shown to be a radiosensitizer in the treatment of NSCLC cells. [2]

**Reference:** 1. Evers et al., Selective inhibition of BRCA2-deficient mammary tumor cell growth by AZD2281 and cisplatin. Clin Cancer Res 2008, 14(12), 3916-3925. Pubmed ID: 18559613

 Senra et al., Inhibition of PARP-1 by olaparib (AZD2281) increases the radiosensitivity of a lung tumor xenograft. Mol Cancer Ther. 2011, 10(10), 1949-1958. Pubmed ID: 21825006

To reorder: <a href="http://www.cellagentech.com/AZD2281-Olaparib/">http://www.cellagentech.com/AZD2281-Olaparib/</a>

For Technical Support: technical@cellagentech.com

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