**Product Specification Sheet**

**Product Name:** AZD2281 (Olaparib)

**Catalog Number:** C2228

**Technical information:**
- **Chemical Formula:** C24H23FN4O3
- **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 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:**
2. 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:** [http://www.cellagentech.com/AZD2281-Olaparib/](http://www.cellagentech.com/AZD2281-Olaparib/)

**For Technical Support:** [technical@cellagentech.com](mailto:technical@cellagentech.com)

*Chemicals are sold for research use only, not for clinical or diagnostic use.*