Cat No. 54-S12

Olaparib

10mg



For research purposes only

Olaparib is a potent small molecule inhibitor of the nuclear enzyme

poly(ADP-ribose) polymerase (PARP). It acts by binding to PARP, inhibiting PARP-mediaed repair of single strand DNA breaks. PARP inhibition may enhance the cytotoxicity of DNA-damaging agents and may reverse tumor cell chemoresistance and radioresistance. PARP catalyzes post-translational ADP-ribosylation of nuclear proteins and can be activated by single-stranded DNA breaks.

TECHNICAL INFORMATION

STORAGE AND HANDLING

Storage: Store at 4°C and protected from light. Following reconstitution, store aliquots at -20°C.

Stability: Stock solutions stable at -20°C for up to 2 years.

Shipping Conditions: Shipped at room temperature.

PRODUCT USE

Soluble in DMSO. Soluble at 20mg/ml.

Other Names: 4-[[3-[[4-(cyclopropylcarbonyl)-1piperazinyl]carbonyl]-4-fluorophenyl]methyl]-1(2H)phthalazinone

Chemical Formula: C24H23FN4N4O3

CAS Number: 763113-22-0

PubChem Substance ID: 23725625

Molecular Weight: 434.46

Purity: >99%

Appearance: Crystalline solid

- Solubility: DMSO
- IC₅₀:1nM

REFERENCES

- Pessetto, Z.Y., et al. (2012). Inhibition of BRCT (BRCA1)
 -phosphoprotein interaction enhances the cytotoxic
 effect of olaparib in breast cancer cells: a proof of con cert study for a synthetic lethal therapeutic option.
 Breast Cancer Res Threat.
- 2. Shimo, T., et al. (2012). Antitumor and anticancer stem cell activity of a poly ADP-ribose polymerase inhibitors olaparib in breast cancer cells. Breast Cancer.
- Ledermann, J., et al (2012). Olaparib maintenance therapy in platinum-sensitive relapsed ovarian cancer. N. Engl. J. Med. 366:1382-92.



