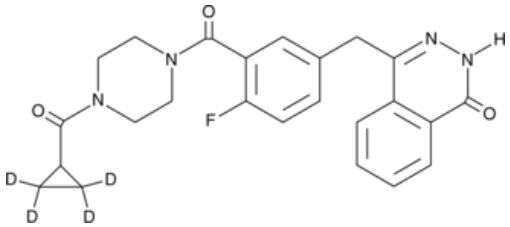
# Product Data Sheet

Product Name: Olaparib-d4
Cat. No.: GC47817

## Chemical Properties

| | | | |
|---|---|---|---|
| Cas. No. | N/A | | |
| SMILES | O=C(C1C([2H])([2H])C1([2H])[2H])N2CCN(C(C3=C(F)C=CC(CC(C4=C5C=CC=C4)=NNC5=O)=C3)=O)CC2 | | |
| Formula | C24H19D4FN4O3 | M.Wt | 438.5 |
| Solubility | DMF: 3 mg/ml,DMSO: 10 mg/ml | Storage | Store at 4°C |
| General tips | For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months. | | |
| Shipping Condition | Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request. | | |

Structure




## Background

Olaparib-$d_4$ is intended for use as an internal standard for the quantification of olaparib by GC- or LC-MS. Olaparib is a potent inhibitor of PARP1 and PARP2 ($IC_{50}$s = 5 and 1 nM, respectively) but is less effective against the PARP tankyrase-1 ($IC_{50}$ = 1.5 µM).[1] It can be used in cells and in animals, alone or in combination therapy with alkylating agents, to block base excision repair and increase cancer cell death.[1,2,3,4]

1.Menear, K.A., Adcock, C., Boulter, R., et al.4-[3-(4-cyclopropanecarbonylpiperazine-1-carbonyl)-4-fluorobenzyl]-2H-phthalazin-1-one: A novel bioavailable inhibitor of Poly(ADP-ribose) polymerase-1J. Med. Chem.51(20)6581-6591(2008) 2.Yuan, Y., Liao, Y.M., Hsueh, C.T., et al.Novel targeted therapeutics: Inhibitors of MDM2, ALK and PARPJ. Hematol. Oncol.4(16)1-14(2011) 3.Plummer, R.Poly(ADP-ribose) polymerase inhibition: A new direction for BRCA and triple-negative breast

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cancer•Breast Cancer Res.13(4)1-6(2011) 4.Javle, M., and Curtin, N.J.The potential for poly (ADP-ribose) polymerase inhibitors in cancer therapyTher. Adv. Med. Oncol.3(6)257-267(2011)

***Caution: Product has not been fully validated for medical applications. For research use only.***
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