

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(C4=C5C=CC=C4)=NNC5=O)=C3)=O)CC2

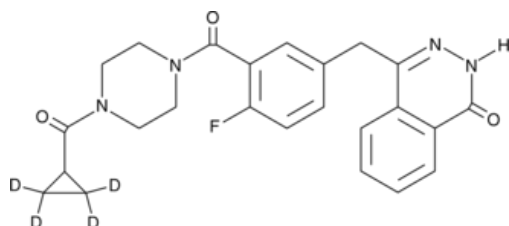
Formula C₂₄H₁₉D₄FN₄O₃ M.Wt 438.5

Solubility DMF: 3 mg/ml, DMSO: 10 mg/ml Storage Store at 4°C

General For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the tips ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Evaluation sample solution : ship with blue ice All other available size: ship with RT, or Condition blue ice upon request.

Structure



Background

Olaparib-d₄ 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 (IC₅₀s = 5 and 1 nM, respectively) but is less effective against the PARP tankyrase-1 (IC₅₀ = 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-1. *J. 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 PARP. *Hematol. Oncol.* 4(16):1-14 (2011) 3. Plummer, R. Poly(ADP-ribose) polymerase inhibition: A new direction for BRCA and triple-negative breast

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

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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)

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