

Product Data Sheet

Product Name: Bexarotene-d4

Cat. No.: GC46923

Chemical Properties

Cas. No. 2182068-00-2

SMILES C=C(C1=C([2H])C([2H])=C(C(O)=O)C([2H])=C1[2H])C2=CC3=C(C=C2C)C(C)(C)CCC3(C)C

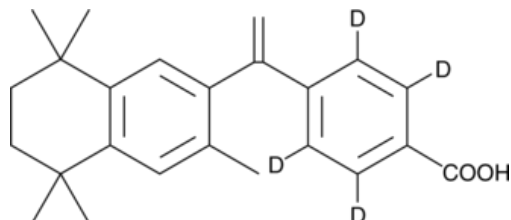
Formula C₂₄H₂₄D₄O₂ M.Wt 352.5

Solubility DMF: 20 mg/ml, DMF:PBS (pH 7.2) Storage Store at -20°C
(1:3): 0.25 mg/ml, DMSO: 10 mg/ml, Ethanol: 0.5 mg/ml

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

Bexarotene-d₄ is intended for use as an internal standard for the quantification of bexarotene by GC- or LC-MS. Bexarotene is a high-affinity ligand for retinoid X receptors (RXRs) (EC₅₀s = 28, 25, and 20 nM for RXRα, β, and γ, respectively).¹ It inhibits cell cycle progression, induces apoptosis, prevents or overcomes multidrug resistance through multidrug resistance protein 1 (MDR1), and blocks angiogenesis and metastasis, making it a promising chemopreventive agent against cancer.^{2,3} Bexarotene also, through RXR activation, stimulates clearance of soluble β-amyloid, reduces plaque area, and reverses deficits related to Alzheimer's disease in mice.⁴

1. Boehm, M.F., Zhang, L., Zhi, L., et al. Design and synthesis of potent retinoid X receptor selective

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

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ligands that induce apoptosis in leukemia cells *J. Med. Chem.* 38(16)3146-3155(1995) 2. Bischoff, E.D., Gottardis, M.M., Moon, T.E., et al. Beyond tamoxifen: The retinoid X receptor-selective ligand LGD1069 (TARGRETIN) causes complete regression of mammary carcinoma *Cancer Res.* 58(3)479-484(1998) 3. Qu, L., and Tang, X. Bexarotene: A promising anticancer agent *Cancer Chemother. Pharmacol.* 65(2)201-205(2010) 4. Cramer, P.E., Cirrito, J.R., Wesson, D.W., et al. ApoE-directed therapeutics rapidly clear β -amyloid and reverse deficits in AD mouse models *Science* 335(6057)1503-1506(2012)

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