Product Data Sheet

Product Name: Fulvestrant-d3
Cat. No.: GC40241

Chemical Properties

Cas. No.

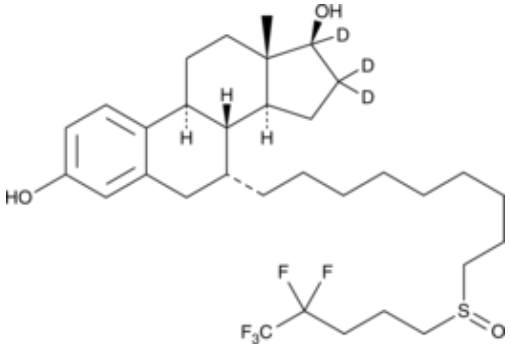
SMILES OC1=CC=C2C(C[C@@H](CCCCCCCCCS(CCCC(F)(F)C(F)(F)F)=O)[C@]3([H])[C@]2([H])CC[C@@]4(C)[C@@]3([H])CC([2H])([2H])[C@]4([2H])O)=C1

Formula	C32H44D3F5O3S	M.Wt	609.8
Solubility	DMF: 25 mg/ml,DMSO: 20 mg/ml,Ethanol: 25 mg/ml	Storage	Store at -20°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

Fulvestrant-d3 is intended for use as an internal standard for the quantification of fulvestrant by GC- or LC-MS. Fulvestrant is a selective estrogen receptor degrader (SERD) that downregulates and degrades estrogen receptor α (ERα). It binds to rat uterine ER with an IC50 value of 44.8 nM and prevents uterine weight increases induced by estradiol in immature rats (ED50 = 0.06 mg/kg per day) but has no effect on uterine weight alone. It also decreases uterine weight in adult rats without affecting the production of luteinizing and follicle-stimulating hormones and prolactin. Fulvestrant inhibits the growth of ER-positive MCF-7 human breast cancer cells but not ER-negative BT-20 cells when used at a concentration of 1 µg/ml. It also prevents tumor growth in MCF-7 and Br10 breast

cancer mouse xenograft models when used at a single dose of 5 mg per animal. Fulvestrant is neuroprotective in vitro against neurotoxicity induced by glutamate- and amyloid-β (1-42) (Aβ42) in primary rat hippocampal cells. Formulations containing fulvestrant have been used in the treatment of estrogen-sensitive breast cancer.