

Product Specification Sheet

Product Name: Fulvestrant (ICI-182780)

Catalog Number: C4218

Technical information:

Chemical Formula: $C_{32}H_{47}F_5O_3S$

CAS #: 129453-61-8

Molecular Weight: 606.77

Purity: > 98%

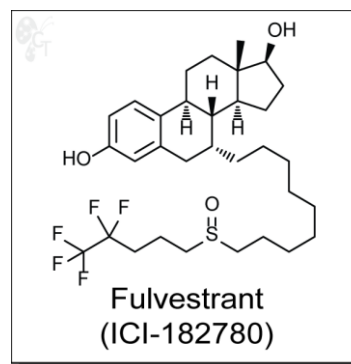
Appearance: White solid

Solubility: Soluble in DMSO up to 100 mM

Chemical Name: 7-[9-[(4,4,5,5,5-pentafluoropentyl)sulfinyl]nonyl]-(7 α ,17 β)-estra-1,3,5(10)-triene-3,17-diol

Storage: For longer shelf life, store solid powder or DMSO solution at -20°C desiccated.

Shelf Life: In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.



- Handling:**
- To make 10 mM stock solution, add 0.165mL of DMSO for each mg of Fulvestrant (ICI-182780).
 - For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

Biological Activity: Fulvestrant (ICI-182780) is an estrogen receptor (ER) antagonist with an IC₅₀ of 9.4 nM in a cell-free assay. It shows potent inhibitory effect in the growth of MCF-7 human breast cancer cells, with an IC₅₀ of 0.29 nM. [1] Unlike tamoxifen, Fulvestrant (ICI-182780) is devoid of agonist activity and serves as a "pure" antioestrogen. [1]

Binding of Fulvestrant to the ER induces a rapid loss of ER protein from breast carcinoma cells. [2] Fulvestrant (ICI-182780) is approved by FDA for the treatment of ER α -positive metastatic breast cancer in postmenopausal women with disease progression following anti-estrogen therapy. It has been also subjected in a Phase III clinical trial in patients with HER2 negative postmenopausal metastatic breast cancer. [3]"

- Reference:**
1. Wakeling AE, et al. A potent specific pure antiestrogen with clinical potential. Cancer Res. 1991; 51(15):3867-73 Pubmed ID: 1855205
 2. Wakeling AE. Similarities and distinctions in the mode of action of different classes of antioestrogens. Endocr Relat Cancer. 2000; 7(1):17-28 Pubmed ID: 10808193
 3. <https://clinicaltrials.gov/show/NCT02383030> Pubmed ID: NCT02383030

To reorder: <http://www.cellagentech.com/Fulvestrant-ICI-182780/>

For Technical Support: technical@cellagentech.com

Chemicals are sold for research use only, not for clinical or diagnostic use.