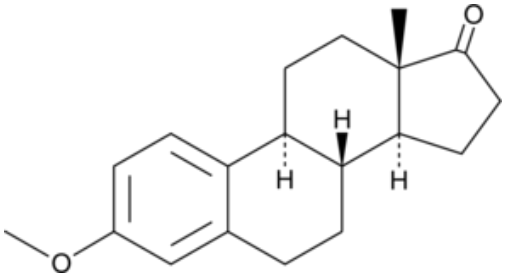
Product Data Sheet

Product Name: Estrone 3-methyl ether
Cat. No.: GC45451

Chemical Properties

Cas. No.	1624-62-0		
SMILES	O=C1CC[C@@]2([H])[C@]3([H])CCC4=CC(OC)=CC=C4[C@@]3([H])CC[C@@]21C		
Formula	C19H24O2	M.Wt	284.4
Solubility	Chloroform: 30 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

Estrone 3-methyl ether is a synthetic estrogen and derivative of estrone .1 It stimulates proliferation of estrogen-dependent MCF-7 breast cancer cells in vitro when used at concentrations ranging from 0.16 to 20 μM but lacks estrogen receptor (ER) binding activity (IC50s = >100 μM for ERα and ERβ). Estrone 3-methyl ether has been used in the synthesis of various estrogen receptor modulators.2

References

1. Alsayari, A., Kopel, L., Ahmed, M.S., et al. Design, synthesis, and biological evaluation of steroidal analogs as estrogenic/anti-estrogenic agents. Steroids 118, 32-40 (2017).
2. Kuznetsov, Y.V., Levina, I.S., Scherbakov, A.M., et al. New estrogen receptor antagonists. 3,20-Dihydroxy-19-norpregna-1,3,5(10)-trienes: Synthesis, molecular modeling, and biological evaluation. Eur. J. Med. Chem. 143, 670-682 (2018).

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