

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

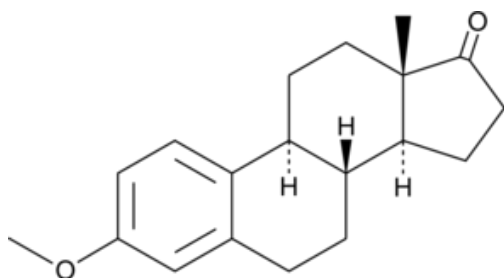
Solubility Chloroform: 30 mg/ml

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. 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.

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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