

Product Data Sheet

Product Name: Clomiphene citrate

Cat. No.: GC15366

Chemical Properties

Cas. No. 50-41-9

Chemical Name 2-[4-[(Z)-2-chloro-1,2-diphenylethenyl]phenoxy]-N,N-diethylethanamine;2-hydroxypropane-1,2,3-tricarboxylic acid

SMILES CCN(CC)CCOC1=CC=C(C=C1)C(=C(C2=CC=CC=C2)Cl)C3=CC=CC=C3.C(C(=O)O)C(CC(=O)O)(C(=O)O)O

Formula $C_{26}H_{28}ClNO \cdot C_6H_8O_7$

M.Wt 598.08

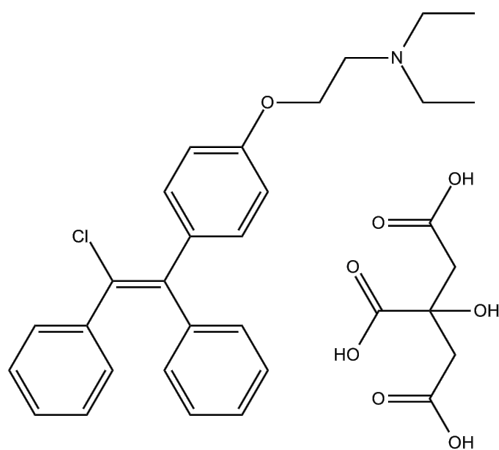
Solubility $\geq 23\text{mg/mL}$ in DMSO

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

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

Clomiphene citrate (Clomifene citrate) is a selective estrogen receptor modulator. Target: Estrogen Receptor/ERR. Clomifene citrate (CC) acted as an estrogen antagonist regardless of the concentration of E2 added together. In conclusion, CC acts as an estrogen agonist/antagonist via ER alpha in a coexisting estrogen concentration-dependent way whereas it acts as an estrogen antagonist via ER beta whether or not estrogen is present [1]. Clomiphene was effective in increasing pregnancy rate compared to placebo (OR 5.8, 95% CI 1.6 to 21.5) as was clomiphene plus dexamethasone treatment (OR 9.46, 95% CI 5.1 to 17.7) compared to clomiphene alone. A significant improvement in the pregnancy rate was reported for clomiphene plus combined oral contraceptives versus clomiphene alone. No evidence of a difference in effect on pregnancy rate was found with any of the other comparisons [2].

References:

- [1]. Kurosawa, T., et al., Clomiphene citrate elicits estrogen agonistic/antagonistic effects differentially via estrogen receptors alpha and beta. *Endocr J*, 2010. 57(6): p. 517-21.
- [2]. Brown, J., et al., Clomiphene and anti-oestrogens for ovulation induction in PCOS. *Cochrane Database Syst Rev*, 2009(4): p. CD002249.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA