

## Product Data Sheet

Product Name: 10 $\beta$ ,17 $\beta$ -dihydroxyestra-1,4-dien-3-one

Cat. No.: GC38542

### Chemical Properties

Cas. No. 549-02-0

SMILES C[C@@]12[C@@H](O)CC[C@@]1([H])[C@]3([H])CCC4=CC(C=C[C@]4(O)[C@@]3([H])CC2)=O

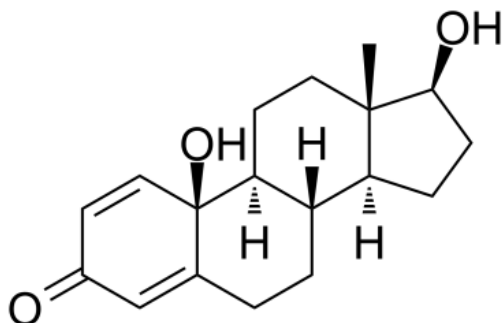
Formula C<sub>18</sub>H<sub>24</sub>O<sub>3</sub> M.Wt 288.38

Solubility DMSO: 250 mg/mL (866.91 mM) 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

10 $\beta$ ,17 $\beta$ -dihydroxyestra-1,4-dien-3-one (DHED) is a brain-targeting bioprecursor prodrug of the main human estrogen, 17 $\beta$ -estradiol, alleviates hot flashes in rat models of thermoregulatory dysfunction of the brain[1].

10 $\beta$ ,17 $\beta$ -dihydroxyestra-1,4-dien-3-one (DHED), is an inactive bioprecursor prodrug of 17 $\beta$ -estradiol converting to 17 $\beta$ -estradiol only in the brain. DHED as an E2-bioprecursor may be a viable approach

**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

---

for delivering E2 selectively into the brain for the potential treatment of hot flushes[1].

[1]. Merchenthaler I, et al. Treatment with an orally bioavailable prodrug of 17 $\beta$ -estradiol alleviates hot flushes without hormonal effects in the periphery. Sci Rep. 2016 Aug 1;6:30721.

***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](mailto:tech@glpbio.com)***

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