

## Product Data Sheet

Product Name: Estriol-d2

Cat. No.: GC45450

### Chemical Properties

Cas. No. 53866-32-3

SMILES OC1=C([2H])C=C2C(CC[C@]3([H])[C@]2([H])CC[C@@]4(C)[C@@]3([H])C[C@@H](O)[C@@H]4O)=C1[2H]

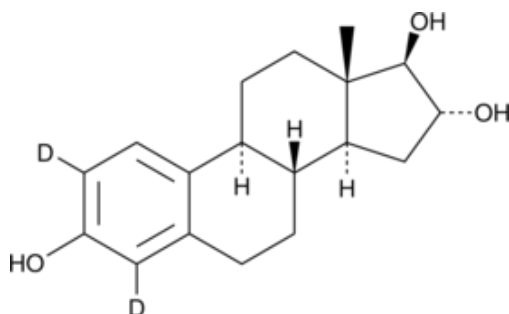
Formula C<sub>18</sub>H<sub>22</sub>D<sub>2</sub>O<sub>3</sub> M.Wt 290.4

Solubility DMF: 30 mg/ml, DMF:PBS(pH 7.2) (1:1): 0.5 mg/ml, DMSO: 20 mg/ml, Ethanol: 5 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

Estriol-d2 is intended for use as an internal standard for the quantification of estriol by GC- or LC-MS. Estriol is a metabolite of estradiol and a major estrogen produced in the later stages of pregnancy. In a longitudinal study in healthy pregnant women, total plasma estriol levels increased from <10 ng/ml at 8-10 weeks gestation to approximately 150 ng/ml at week 38.1 The majority of the estriol synthesized in the later stages of pregnancy originates from fetal dehydroepiandrosterone sulfate and serves as a direct marker of fetal adrenal gland activity.2 Saliva contains primarily unbound and unconjugated estriol and is commonly used for monitoring estriol levels.2,3 Plasma levels of estriol in

**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

---

males and non-pregnant females is less than 2 ng/ml.<sup>4</sup>

### References

1. Peter, M., Dorr, H.G., and Sippell, W.G. Changes in the concentrations of dehydroepiandrosterone sulfate and estriol in maternal plasma during pregnancy: A longitudinal study in healthy women throughout gestation and at term. *Hormone Research* 42, 278-281 (1994).
2. Goodwin, T.M. A role for estriol in human labor, term and preterm. *American Journal of Obstetrics and Gynecology* 180, S208-S213 (1999).
3. Voss, H.F. Hormonal pathways of preterm birth. *American Journal of Obstetrics and Gynecology* 180, S226-S231 (1999).
4. . Steroid levels in humans. (1999).

**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