

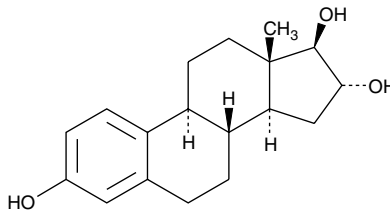
Product Information



Estriol

Item No. 10006484

CAS Registry No.: 50-27-1
Formal Name: estra-1,3,5(10)-triene-3,16 α ,17 β -triol
Synonyms: E₃, 16 α -hydroxy-17 β -estradiol, 1,3,5(10)-Estratriene-3,16 α ,17 β -triol
MF: C₁₈H₂₄O₃
FW: 288.4
Purity: $\geq 95\%$
Stability: ≥ 2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max} : 281 nm



Laboratory Procedures

For long term storage, we suggest that estriol be stored as supplied at -20°C . It should be stable for at least two years.

Estriol is supplied as a crystalline solid. A stock solution may be made by dissolving the estriol in an organic solvent purged with an inert gas. Estriol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of estriol in these solvents is approximately 5, 20, and 30 mg/ml, respectively.

Estriol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, estriol should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Estriol has a solubility of approximately 0.5 mg/ml in a 1:10 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

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 (DHEAS) 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 males and non-pregnant females is less than 2 ng/ml.⁴

References

1. Peter, M., Dörr, 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. *Horm. Res.* **42**, 278-281 (1994).
2. Goodwin, T.M. A role for estriol in human labor, term and preterm. *Am. J. Obstet. Gynecol.* **180**, S208-S213 (1999).
3. Voss, H.F. Hormonal pathways of preterm birth. *Am. J. Obstet. Gynecol.* **180**, S226-S231 (1999).
4. Electronic Citation. Steroid levels in humans, (1999). Anonymous

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/10006484

Cayman Chemical

Mailing address

1180 E. Ellsworth Road
Ann Arbor, MI
48108 USA

Phone

(800) 364-9897
(734) 971-3335

Fax

(734) 971-3640

E-Mail

custserv@caymanchem.com

Web

www.caymanchem.com

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery**.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a **refund** of the purchase price, or at Cayman's option, the **replacement**, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our Warranty and Limitation of Remedy located on our website and in our catalog.

Copyright Cayman Chemical Company, 08/01/2014