

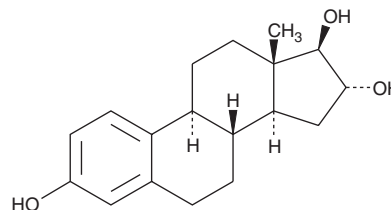
PRODUCT INFORMATION



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%
UV/Vis.: λ_{max} : 281 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Estriol is supplied as a crystalline solid. A stock solution may be made by dissolving the estriol in the solvent of choice, which should be 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 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

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

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM