

Product Name: α -Estradiol

Catalog No.: 2823

Batch No.: 4

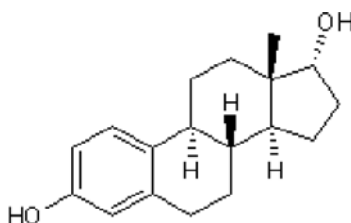
CAS Number: 57-91-0

EC Number: 200-354-8

IUPAC Name: (17 α)-Estra-1,3,5(10)-triene-3,17-diol

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₈H₂₄O₂.
Batch Molecular Weight: 272.38
Physical Appearance: White solid
Solubility: DMSO to 100 mM
 ethanol to 100 mM
Storage: Store at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 98.5% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Optical Rotation: [α]_D = +50.7 (Concentration = 0.9, Solvent = 1,4-Dioxane)
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	79.37	8.88	
Found	79.3	8.91	

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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IUPAC Name: (17 α)-Estra-1,3,5(10)-triene-3,17-diol

Description:

α -Estradiol is an endogenous estrogen receptor ligand (K_i values are 0.2 and 1.2 nM for ER α and ER β receptors respectively). β -Estradiol also available.

Physical and Chemical Properties:

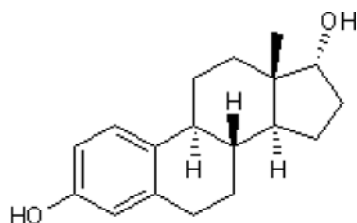
Batch Molecular Formula: C₁₈H₂₄O₂.

Batch Molecular Weight: 272.38

Physical Appearance: White solid

Minimum Purity: $\geq 97\%$

Batch Molecular Structure:



Storage: Store at RT

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Toran-Allerand et al (2002) ER-X: a novel, plasma membrane-associated, putative estrogen receptor that is regulated during development and after ischemic brain injury. *J.Neurosci.* **22** 8391. PMID: 12351713.

Kuiper et al (1997) Comparison of the ligand binding specificity and transcript tissue distribution of estrogen receptors α and β . *Endocrinology* **138** 863. PMID: 9048584.

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