Product Information

Estradiol Benzoate
Item No. 10006487

CAS Registry No.: 50-50-0
Formal Name: estr-1,3,5(10)-triene-3,17β-diol 3-benzoate
Synonyms: β-Estradiol benzoate; 17β-Estradiol 3-benzoate; 17β-Oestradiol benzoate; E₂ Benzoate
MF: C₁₉H₂₂O₄
FW: 376.5
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid

Laboratory Procedures

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

Estradiol benzoate is supplied as a crystalline solid. A stock solution may be made by dissolving the estradiol benzoate in an organic solvent purged with an inert gas. Estradiol benzoate is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of estradiol benzoate in these solvents is 2 mg/ml in ethanol and 30 mg/ml in DMSO and DMF.

Estradiol benzoate is sparingly soluble in aqueous buffers. Therefore, further dilutions of the organic solvent solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Estrogens direct the development of the female genotype in embryogenesis and at puberty. Estradiol is the major estrogen secreted by the premenopausal ovary. Estradiol benzoate is an estradiol analog which contains a benzyl ester at the C-3 position. It is often used in combination with a progestin to induce estrus in domestic livestock. Estradiol benzoate binds to the human and murine estrogen receptor α (ERα), and chicken ER with IC₅₀ values in the range of 22-28 nM. This reflects a 6-10 fold reduction in binding affinity compared to estradiol.

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/10006487.

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 to your institution.

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