

Product Information

Product ID E7376
CAS No. 50-28-2
Chemical Name (17 β)-Estra-1,3,5(10)-triene-3,17-diol

Synonym Dimenformon, Estrace, Estraderm, Evorel, Macrodiol, Menorest, Profoliol B, System, Vagifem, Zumenon

Formula C₁₈H₂₄O₂

Formula Wt. 272.38

Melting Point 173-179 °C

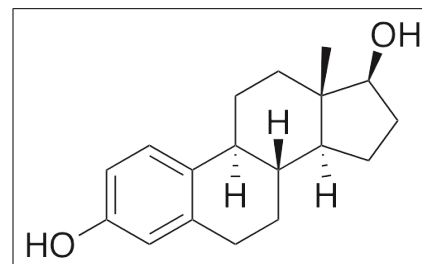
Purity ≥97%

Solubility Soluble in alcohol (35 mg/mL), acetone, dioxane, and other organic solvent. Insoluble in water.

Store Temp Ambient

Ship Temp Ambient

Description Estradiol is an endogenous estrogenic steroid hormone commonly used in oral contraceptives and hormone replacement therapy (HRT). Estradiol regulates estrous and menstrual reproductive cycles, induces growth in reproductive organs, and increases secretion of luteinizing hormone (LH). Estradiol inhibits acetylcholine-induced vascular constriction in post-menopausal women and inhibits sperm apoptosis in vitro. Estradiol displays some additional anticancer potential, inhibiting growth and proliferation of prostate cancer cells. Estradiol also exhibits antioxidative benefit, inhibiting oxidative stress-induced cell death and damage and inhibiting glutamate-induced neurotoxicity.



Bulk quantities available upon request

Product ID	Size
E7376	1 g
E7376	5 g
E7376	25 g

References Pentikäinen V, Erkkilä K, Suomalainen L, et al. Estradiol acts as a germ cell survival factor in the human testis in vitro. *J Clin Endocrinol Metab.* 2000 May;85(5):2057-67. PMID: 10843196.

Behl C, Widmann M, Trapp T, et al. 17-beta estradiol protects neurons from oxidative stress-induced cell death in vitro. *Biochem Biophys Res Commun.* 1995 Nov 13;216(2):473-82. PMID: 7488136.

Collins P, Rosano GM, Sarrel PM, et al. 17 beta-Estradiol attenuates acetylcholine-induced coronary arterial constriction in women but not men with coronary heart disease. *Circulation.* 1995 Jul 1;92(1):24-30. PMID: 7788912.

Carruba G, Pfeffer U, Fecarotta E, et al. Estradiol inhibits growth of hormone-nonresponsive PC3 human prostate cancer cells. *Cancer Res.* 1994 Mar 1;54(5):1190-3. PMID: 8118804.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.