PRODUCT INFORMATION



2-methoxy Estrone

Item No. 34155

CAS Registry No.: 362-08-3

Formal Name: 3-hydroxy-2-methoxy-estra-

1,3,5(10)-trien-17-one

Synonyms: 2-MeOE₁, 2-methoxy E₁

MF: $C_{19}H_{24}O_3$ FW: 300.4 **Purity:** ≥95% Supplied as: A solid Storage: -20°C Stability: ≥4 years

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

Laboratory Procedures

2-methoxy Estrone is supplied as a solid. A stock solution may be made by dissolving the 2-methoxy estrone in the solvent of choice, which should be purged with an inert gas. 2-methoxy Estrone is slightly soluble in chloroform.

Description

2-methoxy Estrone is an active metabolite of the endogenous estrogen estrone (Item No. 10006485).¹ It is formed from estrone by catechol-O-methyltransferase (COMT). 2-methoxy Estrone inhibits the proliferation of isolated bovine brain-derived capillary endothelial cells (IC₅₀ = 11.5 μ M).² It increases the levels of 6-keto prostaglandin $F_{1\alpha}$ (6-keto PGF $_{1\alpha}$; Item No. 15210) in human umbilical vein endothelial cells (HUVECs) when used at concentrations of 0.001, 0.01, and 0.1 μ M.³ 2-methoxy Estrone (0.5 mg/kg) reduces ovariectomy-induced increases in serum cholesterol in rats.4

References

- 1. Dawling, S., Roodi, N., Mernaugh, R.L., et al. Catechol-O-methyltransferase (COMT)-mediated metabolism of catechol estrogens: Comparison of wild-type and variant COMT isoforms. Cancer Res. 61(18), 6716-6722 (2001).
- 2. Fotsis, T., Zhang, Y., Pepper, M.S., et al. The endogenous oestrogen metabolite 2-methoxyoestradiol inhibits angiogenesis and suppresses tumour growth. Nature 368(6468), 237-239 (1994).
- Seeger, H., Mueck, A.O., and Lippert, T.H. Effect of estradiol metabolites on prostacyclin synthesis in human endothelial cell cultures. Life Sci. 65(13), PL167-PL170 (1999).
- 4. Liu, D. and Bachmann, K.A. An investigation of the relationship between estrogen, estrogen metabolites and blood cholesterol levels in ovariectomized rats. J. Pharmacol. Exp. Ther. 286(1), 561-568 (1998).

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

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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