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## **Product Information**

Product ID M1678 CAS No. 362-07-2

**Chemical Name** 

Synonym 2-Hydroxyestradol 2-methyl ether, 2-Methoxyestradiol- 17B,

Panzem

Formula C<sub>19</sub>H<sub>26</sub>O<sub>3</sub> Formula Wt. 302.41 Melting Point 188-190°C Purity ≥98%

Solubility Soluble in DMSO or ethanol.

OHHO

Bulk quanitites available upon request

Product ID Size M1678 5 mg M1678 10 mg M1678 50 mg

Store Temp -20°C Ship Temp Ambient

**Description** 2-Methoxyestradiol is a metabolite of estradiol that exhibits anti-angiogenic, vasodilatory, antihypertensive, anti-fibrotic, anticancer chemotherapeutic and chemopreventive activities. 2-Methoxyestradiol also displays antimitotic activity, binding the colchicine site of tubulin and disrupting the microtubule process during cell division. This compound decreases tumor growth, VEGF expression, and angiogenesis in animal models of hepatocellular carcinoma and prevents initial development of tumors in animal models of prostate cancer. In hypertensive rates, 2-methoxyestradiol decreases mean arterial blood pressure. Additionally, this compound inhibits TGF-β3-induced fibrosis in vitro, decreasing expression of collagen, PAI-1, CTGF, and α-

SMA and preventing phosphorylation of Smad2/3.

References Yuan W, Yu Y, Li J, et al. Estrogen metabolite 2-methoxyestradiol prevents hypertension in deoxycorticosterone acetate-salt rats. Cardiovasc Drugs Ther. 2013 Feb;27(1):17-22. PMID: 23229845.

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Du B, Wang SY, Shi XF, et al. The effect of 2-methoxyestradiol liposome on growth inhibition, angiogenesis and expression of VEGF and Ki67 in mice bearing H22 hepatocellular carcinoma. Tumori. 2011 Sep-Oct;97(5):660-5. PMID: 22158500.

Garcia GE, Wisniewski HG, Lucia MS, et al. 2-Methoxyestradiol inhibits prostate tumor development in transgenic adenocarcinoma of mouse prostate: role of tumor necrosis factor-alpha-stimulated gene 6. Clin Cancer Res. 2006 Feb 1;12(3 Pt 1):980-8. PMID: 16467113.

Lakhani NJ, Sarkar MA, Venitz J, et al. 2-Methoxyestradiol, a promising anticancer agent. Pharmacotherapy. 2003 Feb;23(2):165 -72. PMID: 12587805.

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