



LKT Laboratories, Inc.

## 2-Methoxyestradiol

Phone: 888-558-5227  
651-644-8424  
Fax: 888-558-7329  
Email: [getinfo@lktlabs.com](mailto:getinfo@lktlabs.com)  
Web: [lktlabs.com](http://lktlabs.com)

### Product Information

Product ID M1678

CAS No. 362-07-2

#### Chemical Name

Synonym 2-Hydroxyestradiol 2-methyl ether, 2-Methoxyestradiol- 17B, Panzem

Formula  $C_{19}H_{26}O_3$

Formula Wt. 302.41

Melting Point 188-190°C

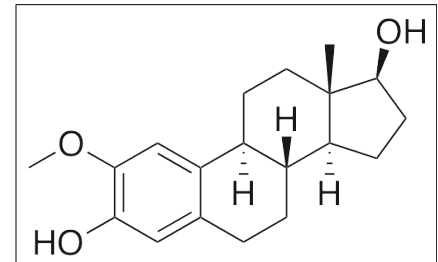
Purity  $\geq 98\%$

Solubility Soluble in DMSO or ethanol.

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 antimetabolic 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 rats, 2-methoxyestradiol decreases mean arterial blood pressure. Additionally, this compound inhibits TGF- $\beta$ 3-induced fibrosis in vitro, decreasing expression of collagen, PAI-1, CTGF, and  $\alpha$ -SMA and preventing phosphorylation of Smad2/3.



### Pricing and Availability

*Bulk quantities available upon request*

Product ID	Size	List Price
M1678	5 mg	\$36.00
M1678	10 mg	\$67.40
M1678	50 mg	\$247.30

**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.

Salama SA, Diaz-Arrastia CR, Kilic GS, et al. 2-Methoxyestradiol causes functional repression of transforming growth factor  $\beta$ 3 signaling by ameliorating Smad and non-Smad signaling pathways in immortalized uterine fibroid cells. *Fertil Steril.* 2012 Jul;98(1):178-84. PMID: 22579131.

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.