



LKT Laboratories, Inc.

## Droloxifene Citrate

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### Product Information

Product ID D6958

CAS No. 97752-20-0

Chemical Name

Synonym

Formula  $C_{26}H_{29}NO_2 \cdot C_6H_8O_7$

Formula Wt. 579.64

Melting Point

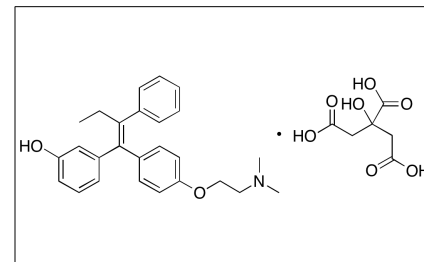
Purity  $\geq 98\%$

Solubility

Store Temp Ambient

Ship Temp Ambient

**Description** Droloxifene is an anti-estrogen triphenylthylene selective estrogen receptor modulator (SERM); it is an analog of tamoxifen. Droloxifene acts as an estrogen receptor agonist in bone and as an estrogen receptor antagonist in breast tissue. As a result of these actions, this compound exhibits anticancer chemotherapeutic, chemopreventive, anti-osteoporotic, and anti-resorptive benefits. In breast cancer cells, droloxifene decreases production of NO and increases levels of pro-apoptotic TGF- $\beta$ . Droloxifene increases apoptosis in luteal cells in vivo, increasing levels of c-myc and increasing the Bax/Bcl-2 ratio. In ovariectomized rats that act as a postmenopausal animal model, droloxifene inhibits bone resorption and turnover as well as estrogen-related bone loss. This compound also decreases levels of E-selectin and increases levels of vascular cellular adhesion molecule 1 (VCAM-1) in clinical settings.



**Bulk quantities available upon request**

**Product ID Size**

D6958 25 mg

D6958 100 mg

D6958 250 mg

**References** Shelly W, Draper MW, Krishnan V, et al. Selective estrogen receptor modulators: an update on recent clinical findings. *Obstet Gynecol Surv.* 2008 Mar;63(3):163-81. PMID: 18279543.

Martin JH, Symonds A, Chohan S. Down-regulation of nitric oxide production by droloxifene and toremifene in human breast cancer cells. *Oncol Rep.* 2003 Jul-Aug;10(4):979-84. PMID: 12792756

Herrington DM, Brosnihan KB, Pusser BE, et al. Differential effects of E and droloxifene on C-reactive protein and other markers of inflammation in healthy postmenopausal women. *J Clin Endocrinol Metab.* 2001 Sep;86(9):4216-22. PMID: 11549652.

Leng Y, Feng Y, Cao L, et al. Effects of droloxifene on apoptosis and Bax, Bcl-2 protein expression of luteal cells in pseudopregnant rats. *Acta Pharmacol Sin.* 2001 Feb;22(2):155-62. PMID: 11741521.

Leng Y, Gu ZP, Cao L. Apoptosis induced by droloxifene and c-myc, bax and bcl-2 mRNA expression in cultured luteal cells of rats. *Eur J Pharmacol.* 2000 Dec 8;409(2):123-31. PMID: 11104825.

Knabbe C, Zugmaier G, Schmahl M, et al. Induction of transforming growth factor beta by the antiestrogens droloxifene, tamoxifen, and toremifene in MCF-7 cells. *Am J Clin Oncol.* 1991;14 Suppl 2:S15-20. PMID: 1835818.

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