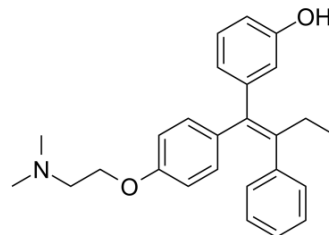


## Droloxifene

Cat. No.:	HY-121149		
CAS No.:	82413-20-5		
Molecular Formula:	C <sub>26</sub> H <sub>29</sub> NO <sub>2</sub>		
Molecular Weight:	387.51		
Target:	Estrogen Receptor/ERR		
Pathway:	Others		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### BIOLOGICAL ACTIVITY

<b>Description</b>	Droloxifene, a Tamoxifen derivative, is an orally active and selective <b>estrogen receptor</b> modulator. Droloxifene shows antiestrogenic and anti-implantation effects. Droloxifene induces p53 expression and apoptosis in MCF-7 cells. Droloxifene prevents bone loss in ovariectomized rats <sup>[1][2][3]</sup> .		
<b>In Vitro</b>	Droloxifene (10 nM; 16-18 hours) induces apoptosis in MCF-7 cells <sup>[1]</sup> . <b>Cell Viability Assay<sup>[2]</sup></b>		
	Cell Line:	MCF-7 cells	
	Concentration:	10 nM	
	Incubation Time:	16-18 hours	
	Result:	Induced cells apoptosis	
<b>In Vivo</b>	Droloxifene (5-20 mg/kg; p.o.; daily for 4 weeks) increases BMD of DFM at 10mg/kg, and completely prevents the decrease of BMC and BMD of DFM induced by ovariectomized (OVX) at 20 mg/kg/day <sup>[3]</sup> .		
	Animal Model:	5-month-old sham-operate rats <sup>[3]</sup>	
	Dosage:	5, 10, 20 mg/kg	
	Administration:	Oral; daily for 4 weeks	
	Result:	BMD of DFM increased significantly at 10mg/kg; completely prevented the decrease of BMC and BMD of DFM induced by OVX at 20 mg/kg/day.	

### REFERENCES

[1]. Herrington DM, et al. Cardiovascular effects of droloxifene, a new selective estrogen receptor modulator, in healthy postmenopausal women. *Arterioscler*

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Thromb Vasc Biol. 2000 Jun;20(6):1606-12.

[2]. Grasser WA, et al. Common mechanism for the estrogen agonist and antagonist activities of droloxifene. J Cell Biochem. 1997 May;65(2):159-71.

[3]. Ke HZ, et al. Droloxifene, a new estrogen antagonist/agonist, prevents bone loss in ovariectomized rats. ndocrinology. 1995 Jun;136(6):2435-41.

[4]. Huang Y, et al. Anti-implantation effect of droloxifene in rats and its relationship with anti-estrogenic activity. Acta Pharmacol Sin. 2005 Oct;26(10):1243-7.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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