

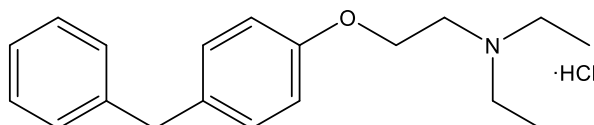
Catalog # 10-1085

Tesmilifene HCl

CAS# 92981-78-7

N,N,-Diethyl-2-[4-(phenylmethyl)phenoxy]ethanamine hydrochloride: BMS-217380-01; YMB1002; DPPE HCl

Lot # X102467



Tesmilifene, an analog of tamoxifen, acts as a chemopotentiator and antineoplastic agent and was developed for the treatment of breast cancer but never marketed.¹ It binds with high affinity to the anti-estrogen binding site (AEBS) in rat liver microsomes but does not bind to the estrogen receptor (at or below 10 μM).² Displaces histamine from AEBS, an activity which correlates with its cytotoxic effects on breast cancer cells.² Enhances the cytotoxicity of taxol, epirubicin, doxorubicin and vinorelbine in multidrug resistance cell lines.³ It has been shown to increase the permeability of the blood-brain and blood-glioma barrier in culture and animal models by modifying brain endothelial functions.⁴

- 1) Sorbera *et al.*, (2003), *A diphenylmethane derivative specific for the antiestrogen binding site found in rat liver microsomes*; *Drugs Fut.* **28** 546
- 2) Brandes *et al.*, (2008), *Tesmilifene hydrochloride*; *Hum. Exp. Toxicol.* **27** 143
- 3) Ferguson *et al.*, (2009), *Enhancement of cytotoxicity of natural product drugs against multidrug resistant variant cell lines of human head and neck squamous cell carcinoma and breast carcinoma by temsilifene*; *Cancer Lett.* **274** 279
- 4) Vigushin *et al.*, (2004), *Tesmilifene modifies brain endothelial functions and opens the blood-brain/blood-glioma barrier*; *Med. Oncol.* **21** 21

PHYSICAL DATA

Molecular Weight:	319.87
Molecular Formula:	C ₁₉ H ₂₅ NO·HCl
Purity:	>98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (30 mg/ml); Water (75 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied at -20°C for up to 2 year from the date of purchase. Protect from exposure to moisture. Solutions in DMSO or water can be stored at -20°C for up to 3 months.

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