

Tamoxifen

Catalog No: tcsc2870



Available Sizes

Size: 500mg

Size: 1g

Size: 5g



Specifications

CAS No:

10540-29-1

Formula:

$C_{26}H_{29}NO$

Pathway:

Others;Autophagy

Target:

Estrogen Receptor/ERR;Autophagy

Purity / Grade:

>98%

Solubility:

DMSO : ≥ 30 mg/mL (80.75 mM)

Alternative Names:

ICI47699;Z-Tamoxifen;trans-Tamoxifen

Observed Molecular Weight:

371.51

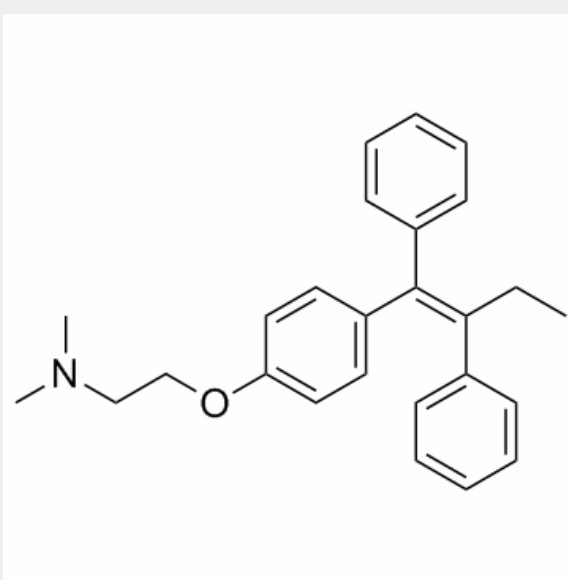
Product Description

Tamoxifen is an antiestrogen by inhibiting the binding of estrogen to **estrogen receptors**.

IC50 & Target: Estrogen receptor^[1]

In Vitro: Tamoxifen shows strong inhibition of MCF-7 cells ($EC_{50}=1.41\ \mu\text{M}$) and to a lesser extent the T47D cells ($EC_{50}=2.5\ \mu\text{M}$) but does not affect the MDA-MB-231 cells^[2].

In Vivo: The Tamoxifen-inducible gene knockout strategy has clear advantages in that expression of a gene can be ablated in adult mice at will in a tissue specific manner. To study the role of Med1 in adult heart, 7-week old *TmcsMed1*^{-/-} mice are given a daily intraperitoneal injection of Tamoxifen at a dose of 65 mg/kg for 5 days and killed at selected intervals thereafter. qPCR analysis of RNA shows that the Med1 expression begin to decrease after 3 days of Tamoxifen injection (about 70% decrease), and by 5 days of injection, Med1 expression is almost non-detectable in the heart. Tamoxifen-inducible cardiac-specific disruption of Med1 (*TmcsMed1*^{-/-}) in adult mice causes dilated cardiomyopathy^[3].



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