



Product Information

Product ID T0250
CAS No. 54965-24-1
Chemical Name (Z)-2-(4-(1,2-Diphenyl-1-butenyl)phenoxy)-N,N-dimethylethylamine citrate

Synonym Kessar, Nolvadex, Taxus, Zynoplex, Zemide

Formula $C_{26}H_{29}NO \cdot C_6H_8O_7$

Formula Wt. 563.64

Melting Point 143-146 °C

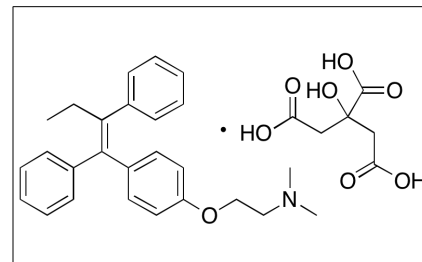
Purity ≥98%

Solubility Slightly soluble in water.
Soluble in ethanol,
methanol or acetone.

Store Temp Ambient

Ship Temp Ambient

Description Tamoxifen is a selective estrogen receptor modulator (SERM) that acts as an ER agonist in the endometrium and as an ER antagonist in breast tissue; it also inhibits PKC. Tamoxifen exhibits anticancer chemotherapeutic, anti-angiogenic, anti-osteoporotic, and antipsychotic activities. Tamoxifen is also a prodrug, transformed into the active metabolite 4-hydroxytamoxifen in vivo. Tamoxifen shows some benefit in clinical settings in the treatment of bipolar I disorder and other mood disorders. In animal models, tamoxifen decreases blood vessel formation and inhibits angiogenesis. In osteoclasts, this compound induces apoptosis by increasing expression of FasL. Additionally, tamoxifen acts as a functional inhibitor of acid sphingomyelinase (FIASMA).



Bulk quantities available upon request

Product ID	Size
T0250	500 mg
T0250	1 g
T0250	5 g

References Yildiz A, Guleryuz S, Ankerst DP, et al. Protein kinase C inhibition in the treatment of mania: a double-blind, placebo-controlled trial of tamoxifen. *Arch Gen Psychiatry*. 2008 Mar;65(3):255-63. PMID: 18316672.

Krum SA, Miranda-Carboni GA, Hauschka PV, et al. Estrogen protects bone by inducing Fas ligand in osteoblasts to regulate osteoclast survival. *EMBO J*. 2008 Feb 6;27(3):535-45. PMID: 18219273.

Steiner AZ, Terplan M, Paulson RJ. Comparison of tamoxifen and clomiphene citrate for ovulation induction: a meta-analysis. *Hum Reprod*. 2005 Jun;20(6):1511-5. PMID: 15845599.

Blackwell KL, Haroon ZA, Shan S, et al. Tamoxifen inhibits angiogenesis in estrogen receptor-negative animal models. *Clin Cancer Res*. 2000 Nov;6(11):4359-64. PMID: 11106254.

Jordan VC. Fourteenth Gaddum Memorial Lecture. A current view of tamoxifen for the treatment and prevention of breast cancer. *Br J Pharmacol*. 1993 Oct;110(2):507-17. PMID: 8242225.

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