Product overview

Name: Tamoxifen
Cat No: HB0601
Short description: Estrogen receptor antagonist/ partial agonist
Biological description: Estrogen receptor antagonist and also partial agonist. Also potent chloride channel HSV-1 inhibitor. Blood brain barrier permeable. Inhibits tumor growth and induces apoptosis in breast cancer cells. Selectively inhibits sterol biosynthesis ($IC_{50} = 1000 \text{ nM}$). Shows neuroprotective potential.
Biological action: Antagonist
Purity: >99%

Properties

Chemical name: \((Z)-2-[4-(1,2-Diphenyl-1-buteryl)phenoxy]-N,N-dimethylethanamine\)
Molecular Weight: 371.52
Chemical structure:

![Chemical structure of Tamoxifen]

Molecular Formula: C\(_{26}\)H\(_{29}\)NO
CAS Number: 10540-29-1
PubChem identifier: 2733526
SMILES: CC/C=C(C/C1=CC=CC=C1)/C2=CC=C(C=C2)OCCN(C)C/C3=CC=CC=C3
InChI: InChI=1S/C26H29NO/c1-4-25(21-11-7-5-8-12-21)26(22-13-9-6-10-14-22)23-15-17-24(18-16-23)28-20-19-27(2)3/h5-18H,4,19-20H2,1-3H3/b26-25-
InChiKey: NKANXQFJJCIGDU-QPLCGJKRSA-N
MDL number: MFCD00010454

Storing and Using Your Product

Storage instructions: Room temperature
Solubility overview: Soluble in DMSO (100mM)
Important: This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

References for Tamoxifen
Tamoxifen inhibits inward rectifier K+ 2.x family of inward rectifier channels by interfering with phosphatidylinositol 4,5-bisphosphate-channel interactions.

PubMedID: 19654266

Both the immunosuppressant SR31747 and the antiestrogen tamoxifen bind to an emopamil-insensitive site of mammalian Delta8-Delta7 sterol isomerase.

PubMedID: 9618436

Growth inhibition of estrogen receptor-positive and aromatase-positive human breast cancer cells in monolayer and spheroid cultures by letrozole, anastrozole, and tamoxifen.

PubMedID: 16263272

Inhibition of herpes simplex virus type 1 entry by chloride channel inhibitors tamoxifen and NPPB.

PubMedID: 24657267