

Tamoxifen

Catalog Number: 1052910

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Synonyms: Crisafenom, Citofen, Nolvadex, Oncomox, Soltamox

 $\textbf{Chemical Name:} \ 2\text{-}[4\text{-}[(Z)\text{-}1,2\text{-}diphenylbut-}1\text{-}enyl] phenoxy]\text{-}N, N-dimethyle than a mine$

Molecular Formula: $C_{26}H_{29}NO$ **Molecular Weight:** 371.5

CAS Number: 10540-29-1

Purity: ≥95% **Applications:** FA

Formulation: Crystalline solid

Storage: Product should be kept at -20°C.

Description

Tamoxifen is a modulator of the estrogen receptor, with tissue specific agonistic and antagonistic effects. It is metabolized in the liver to 4- hydroxytamoxifen (afimoxifene) and N-desmethyl-4-hydroxytamoxifen (endoxifen), which compete with estrogen for binding to the estrogen receptor. Tamoxifen also has neuroprotective properties in female rats and is reported to block certain cancer cell growth.

Preparation & Storage

Soluble in organic solvents such as ethanol or DMSO. Ethanol up to 20mg/ml.

References

- 1.Fisher, B., Costantino, J. P., Wickerham, D. L., Redmond, C. K., Kavanah, M., Cronin, W. M., ... Bowel Project Investigators. (1998). Tamoxifen for prevention of breast cancer: report of the National Surgical Adjuvant Breast and Bowel Project P-1 Study.; Journal of the National Cancer Institute,;90(18), 1371-1388.
- 2. Shiau, A. K., Barstad, D., Loria, P. M., Cheng, L., Kushner, P. J., Agard, D. A., Greene, G. L. (1998). The structural basis of estrogen receptor/coactivator recognition and the antagonism of this interaction by tamoxifen.; Cell,;95(7), 927-937.
- 3. Kimelberg, H. K., Jin, Y., Charniga, C., Feustel, P. J. (2003). Neuroprotective activity of tamoxifen in permanent focal ischemia.; Journal of neurosurgery, 99(1), 138-142.