

Catalog # 10-1256 Tamoxifen citrate

CAS# 54965-21-1 ICI-46474

(2)-2-[4-(1,2-Diphenyl-1-butenyl)phenoxy]-N,N-dimethylethanamine citrate Lot # X101514

Estrogen receptor antagonist/partial agonist. Induces oxidative stress and apoptosis in estrogen receptornegative cancer cell lines¹. Displays neuroprotective effects in permanent focal ischemia². Inhibits PKC³. Potent agonist at GPR30 (membrane estrogen receptor)⁴. Clinically useful breast cancer agent⁵.

- 1) Ferlini et al. (1999), Tamoxifen induces oxidative stress and apoptosis in oestrogen receptor-negative human cancer cell lines; Br. J. Cancer, **79** 257
- 2) Kimelberg et al. (2003), Neuroprotective activity of tamoxifen in permanent focal ischemia; J. Neurosurg., 99 138
- 3) Couldwell et al. (1994), Protein kinase C inhibitors induce apoptosis in human malignant glioma cell lines FEBS Lett., 345 43
- 4) Thomas et al. (2005), Identity of an estrogen membrane receptor coupled to a G protein in human breast cancer cells; Endocrinology, **146** 624
- 5) Jordan et al. (2006), Tamoxifen (ICI46,474) as a targeted therapy to treat and prevent breast cancer; Br. J. Pharmacol., 147 S269

PHYSICAL DATA

Molecular Weight: 563.65

Molecular Formula: $C_{26}H_{29}NO \cdot C_6H_8O_7$ Purity: 99% by TLC

NMR: (Conforms)

Solubility: DMSO (up to 50 mg/ml with warming)

Physical Description: White solid

Storage and Stability: Store as supplied at room temperature for up to 1 year from the date of purchase. Solutions in

DMSO may be stored at -20°C for up to 2 months.

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