

## Certificate of Analysis

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**Product Name:** Tamoxifen citrate

**Catalog No.:** 0999

**Batch No.:** 4

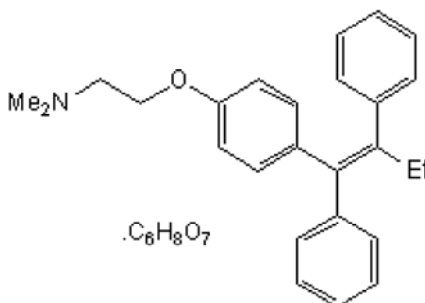
CAS Number: 54965-24-1

EC Number: 259-415-2

IUPAC Name: (Z)-2-[4-(1,2-Diphenyl-1-butenyl)phenoxy]-N,N-dimethylethanamine citrate

### 1. PHYSICAL AND CHEMICAL PROPERTIES

<b>Batch Molecular Formula:</b>	C <sub>26</sub> H <sub>29</sub> NO.C <sub>6</sub> H <sub>8</sub> O <sub>7</sub>
<b>Batch Molecular Weight:</b>	563.65
<b>Physical Appearance:</b>	White solid
<b>Solubility:</b>	ethanol to 5 mM with gentle warming DMSO to 100 mM
<b>Storage:</b>	Desiccate at RT
<b>Batch Molecular Structure:</b>	



### 2. ANALYTICAL DATA

<b>HPLC:</b>	Shows 99.5% purity
<b><sup>1</sup>H NMR:</b>	Consistent with structure
<b>Mass Spectrum:</b>	Consistent with structure
<b>Microanalysis:</b>	
	Carbon Hydrogen Nitrogen
	Theoretical 68.19 6.62 2.49
	Found 67.98 6.66 2.36

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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**Catalog No.:** 0999

**4**

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IUPAC Name: (Z)-2-[4-(1,2-Diphenyl-1-butenyl)phenoxy]-N,N-dimethylethanamine citrate

**Description:**

Tamoxifen citrate is an estrogen receptor antagonist/partial agonist. Selective and potent inhibitor of mammalian sterol isomerase. Neuroprotective in female rats in vivo. Also high affinity agonist at the membrane estrogen receptor GPER. Tamoxifen (Cat. No. 6432) is also available.

**Physical and Chemical Properties:**

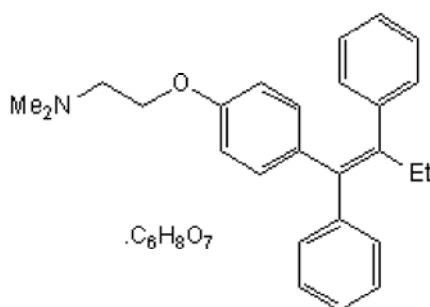
Batch Molecular Formula: C<sub>26</sub>H<sub>29</sub>NO.C<sub>6</sub>H<sub>8</sub>O<sub>7</sub>

Batch Molecular Weight: 563.65

Physical Appearance: White solid

**Minimum Purity:** ≥99%

**Batch Molecular Structure:**



**Storage:** Desiccate at RT

**Solubility & Usage Info:**

ethanol to 5 mM with gentle warming  
DMSO to 100 mM

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**Licensing Information:**

Sold with the permission of AstraZeneca UK Ltd.

**References:**

**Todorova et al** (2011) Tamoxifen and ralox. suppress the proliferation of estrogen receptor-negative cells through inhibition of glutamine uptake. *Cancer Chemother. Pharmacol.* **67** 285. PMID: 20383709.

**Thomas et al** (2005) Identity of an estrogen membrane receptor coupled to a G protein in human breast cancer cells. *Endocrinology* **146** 624. PMID: 15539556.

**Mehta et al** (2003) Tamoxifen, a selective estrogen receptor modulator, reduces ischemic damage caused by middle cerebral artery occlusion in the ovariectomized female rat. *Neuroendocrinology* **77** 44. PMID: 12624540.

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