

# PRODUCT INFORMATION



## Toremifene (citrate)

Item No. 20854

**CAS Registry No.:** 89778-27-8  
**Formal Name:** 2-[4-[(1Z)-4-chloro-1,2-diphenyl-1-buten-1-yl]phenoxy]-N,N-dimethyl-ethanamine, 2-hydroxy-1,2,3-monopropanetricarboxylate  
**Synonyms:** GTx-006, NK 622, NSC 613680

**MF:** C<sub>26</sub>H<sub>28</sub>ClNO • C<sub>6</sub>H<sub>8</sub>O<sub>7</sub>

**FW:** 598.1

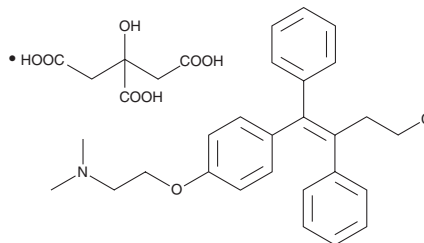
**Purity:** ≥98%

**UV/Vis.:** λ<sub>max</sub>: 236, 276 nm

**Supplied as:** A crystalline solid

**Storage:** -20°C

**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Toremifene (citrate) is supplied as a crystalline solid. A stock solution may be made by dissolving the toremifene (citrate) in the solvent of choice. Toremifene (citrate) is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of toremifene (citrate) in these solvents is approximately 25 and 30 mg/ml, respectively.

Toremifene (citrate) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, toremifene (citrate) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Toremifene (citrate) has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Toremifene (citrate) is an orally bioavailable selective estrogen receptor modulator (SERM) that evokes tissue-dependent effects similar to that of tamoxifen (Item No. 13258).<sup>1</sup> It has been shown to block estrogen-stimulated growth of MCF-7 breast cancer cells grown in tissue culture, to inhibit ovariectomy-induced bone loss in rats, and to stimulate endometrial growth similar to that of tamoxifen.<sup>1</sup>

### Reference

1. Goldstein, S.R., Siddhanti, S., Ciaccia, A.V., *et al.* A pharmacological review of selective oestrogen receptor modulators. *Hum. Reprod. Update* **6(3)**, 212-224 (2000).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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