

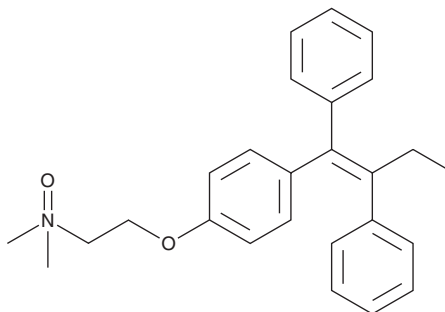
PRODUCT INFORMATION



Tamoxifen N-oxide

Item No. 18642

CAS Registry No.: 75504-34-6
Formal Name: N-oxide-2-[4-[(1Z)-1,2-diphenyl-1-buten-1-yl]phenoxy]-N,N-dimethyl, ethanamine
MF: C₂₆H₂₉NO₂
FW: 387.5
Purity: ≥98%
UV/Vis.: λ_{max}: 237, 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

Tamoxifen N-oxide is supplied as a crystalline solid. A stock solution may be made by dissolving the tamoxifen N-oxide in the solvent of choice, which should be purged with an inert gas. Tamoxifen N-oxide is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of tamoxifen N-oxide in DMSO is approximately 2 mg/ml and approximately 20 mg/ml in ethanol and DMF.

Tamoxifen N-oxide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, tamoxifen N-oxide should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Tamoxifen N-oxide has a solubility of approximately 0.3 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Tamoxifen (Item No. 13258) is a selective estrogen receptor modulator that evokes tissue-dependent effects.¹⁻⁴ Tamoxifen N-oxide is a metabolite of tamoxifen that is produced by the action of flavin-containing monooxygenases.^{5,6} It can be converted back to tamoxifen by cytochrome P450 isoforms and hemoglobin.^{6,7} Like the parent compound, tamoxifen N-oxide can form DNA adducts.^{5,8,9} Tamoxifen N-oxide is a weak inhibitor of human hydroxysteroid sulfotransferase 2A1 (K_s = 9.1 and 16.9 μM for the sulfonation of dehydroepiandrosterone and pregnenolone, respectively).¹⁰

References

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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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