

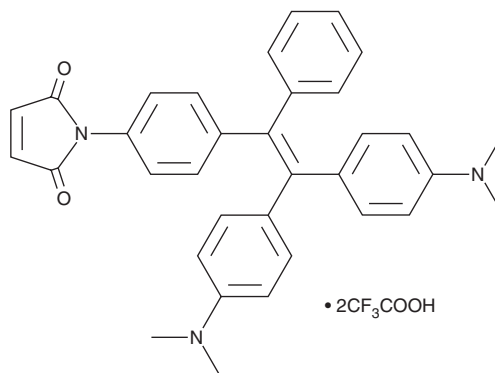
PRODUCT INFORMATION



TPE-NMI (trifluoroacetate salt)

Item No. 40640

Formal Name: 1-[4-[2,2-bis[4-(dimethylamino)phenyl]-1-phenylethenyl]phenyl]-1H-pyrrole-2,5-dione, bis(trifluoroacetate)
Synonym: Tetraphenylethene N-Maleimide
MF: $C_{34}H_{31}N_3O_2 \cdot 2CF_3COOH$
FW: 741.7
Purity: $\geq 98\%$
Ex./Em. Max: 360/505 nm
Supplied as: A solid
Storage: $-20^\circ C$
Stability: ≥ 4 years



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

Laboratory Procedures

TPE-NMI (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the TPE-NMI (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. TPE-NMI (trifluoroacetate salt) is soluble (≥ 10 mg/ml) in ethanol and DMSO.

Description

TPE-NMI is a cell-permeable turn-on fluorescent probe for the detection of unfolded proteins via fluorescence microscopy or flow cytometry.¹ It displays an emission maximum of 505 nm upon excitation at 360 nm. TPE-NMI reacts with exposed thiols on the surface of unfolded proteins. It increases fluorescence in live cells under conditions of cellular stress that increase the level of unfolded proteins, including tunicamycin-induced cell stress, compared to control cells.

Reference

1. Zhang, S., Liu, M., Tan, L.Y.F., *et al.* A maleimide-functionalized tetraphenylethene for measuring and imaging unfolded proteins in cells. *Chem. Asian J.* **14**(6), 904-909 (2019).

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.

WARRANTY AND LIMITATION OF REMEDY

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