

TMEA

33043

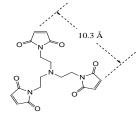
Number

Description

33043

TMEA (Tris-[2-maleimidoethyl]amine), 50mg

Formula: $C_{18}H_{18}N_4O_6$ Molecular Weight: 386.36



Storage: Store product at 4°C protected from moisture. Product is shipped at ambient temperature.

Product Information

- Thermo Scientific TMEA is a trifunctional, maleimide-containing, sulfhydryl-reactive crosslinker. This reagent can be
 used to create trimeric complexes of cysteine-containing peptides and other thiol molecules. It also provides a core
 molecule for construction of dendritic polymers.
- The maleimide-containing reagents are moisture-sensitive. Store product in the original container at 4°C with desiccant. Equilibrate vial to room temperature before opening to avoid moisture condensation onto the product.
- TMEA dissolves in DMF or DMSO up to 10mg/100µL (i.e., 100mg/mL). A working stock solution at 1-100mg/mL can be diluted in additional organic solvent. To avoid excessive precipitation, add the dissolved TMEA <u>slowly</u> to an aqueous buffer until the cloud point is reached. To avoid possible damage to the protein, limit the amount of organic solvent to ≤10% in the final reaction mixture.
- Maleimides react with -SH groups at a pH of 6.5-7.5, forming stable thioether linkages. The reaction is complete in 2 hours at room temperature or ~4 hours at 4°C.
- Some sulfhydryl-containing peptides and proteins may oxidize in solution to form disulfide bonds, which cannot react with maleimides. Disulfide bonds may be reduced to produce free sulfhydryls. After reduction, most reducing reagents must be removed before conjugation. Thermo Scientific Immobilized TCEP Disulfide Reducing Gel (Product No. 77712) enables peptide or protein reduction while recovering the sample in the absence of reducing agents. As an alternative to disulfide reduction, sulfhydryls can be introduced via amine modification using *N*-succinimidyl S-acetylthioacetate (SATA, Product No. 26102) or 2-iminothiolane•HCl (Traut's Reagent, Product No. 26101).
- Avoid sulfhydryl-containing components during conjugation, as these will react with the maleimide portion of the
 reagent, thereby inhibiting and reducing conjugation efficiency of the intended molecule.

This product ("Product") is warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Product documentation, specifications and/or accompanying package inserts ("Documentation") and to be free from defects in material and workmanship. Unless otherwise expressly authorized in writing, Products are supplied for research use only. No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the original purchaser of the Product ("Buyer").

No other warranties, express or implied, are granted, including without limitation, implied warranties of merchantability, fitness for any particular purpose, or non infringement. Buyer's exclusive remedy for non-conforming Products during the warranty period is limited to replacement of or refund for the non-conforming Product(s).

There is no obligation to replace Products as the result of (i) accident, disaster or event of force majeure, (ii) misuse, fault or negligence of or by Buyer, (iii) use of the Products in a manner for which they were not designed, or (iv) improper storage and handling of the Products.

Current product instructions are available at www.thermoscientific.com/pierce. For a faxed copy, call 800-874-3723 or contact your local distributor.

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