1 M DTT

CAT No. APL-1022

DESCRIPTION

1,4 Dithiothreitol (DTT) is a small molecule reducing agent, also known as Cleland's reagent. APOLO's 1 M DTT is a powerful reducing agent that forms a stable six-membered ring with an internal disulfide bond which is resistant to oxidation. DTT is a nearly 7-fold stronger reduction agent than βME (β-mercaptoethanol) and has a less offensive odor and is less toxic.

CONTENT

	APL-1022
1 M DTT	10 mL

STORAGE

This product should be stored at -20°C and avoid repeated freeze-thaw cycles.

APPLICATION

DTT is often used for the following procedures: reducing the disulfide bridge of the cross-linker N,N′-bis(acryloyl) cystamine to break apart the matrix of a polyacrylamide gel, the reduction of disulfide bonds in proteins, the prevention of those bonds from forming between cysteine residues as well as the reduction of thiolated DNA in order to minimize dimerization.

PROTOCOL

SDS-PAGE sample preparation with DTT

1. Dilute the 1 M DTT solution to 50 mM by adding 50 µL of the 1 M DTT solution to 950 µL of ultrapure water.
2. Aliquots of the 50 mM can be added to the samples to a final concentration of 5 mM.
3. Boil the samples for five minutes.
4. Allow the samples to cool.
5. Load the samples onto an SDS-PAGE gel.

PRODUCT USE LIMITATION

Research use only.