

Dithiothreitol (DTT)

Cat. No. DTGZ-0001

Lot. No. (See product label)

Introduction

Description

Dithiothreitol is a high-purity thiol reducing reagent supplied as a crystalline powder for cleaving disulfide bonds and maintaining sulfhydryl groups in the reduced state.

Applications

Reduction of protein disulfide bonds; protection of sulfhydryl groups; protein sample preparation; electrophoresis and general biochemical workflows.

Synonyms

Dithiothreitol; DL-Dithiothreitol; Cleland's reagent; DTT; 1,4-Dithiothreitol

Product Information

Appearance

White crystalline powder.

Form

Powder

CAS No.

3483-12-3

Molecular Formula

C₄H₁₀O₂S₂

Chemical Name

DL-1,4-Dimercapto-2,3-butanediol

Molecular Weight

154.25 g/mol

Purity

99%

Structure

HSCH₂CH(OH)CH(OH)CH₂SH

Function

Thiol reducing agent for disulfide-bond cleavage and sulfhydryl-group protection.

Melting Point

41-45°C

Solubility

Soluble in water, methanol, and dichloromethane.

Quality

Biochemical reagent; 99%

Grade

BR

Notes

The reduced reagent is converted to a stable cyclic disulfide during reduction reactions.

Usage and Packaging

Package

1 g 5 g 25 g 100 g

Storage and Shipping Information

Storage

Store at 2-8°C in a tightly sealed container. Protect from moisture and air.

Stability

Sensitive to oxidation by air, particularly after dissolution.