

DTT (DL-DITHIOTHREITOL), 25g**PG-1820-25G**

DTT (DL-Dithiothreitol) is a potent reducing agent widely used in molecular biology, biochemistry, and protein research. It is commonly employed to reduce disulfide bonds in proteins and peptides, thereby maintaining sulfhydryl groups in a reduced state. DTT is frequently used in protein purification, enzyme stabilization, SDS-PAGE sample preparation, and nucleic acid isolation procedures.

Details

Product Name	DTT (DL-Dithiothreitol)
Description	A strong thiol-based reducing agent used to cleave and prevent the formation of disulfide bonds in proteins and enzymes.
Molecular Weight	154.25 g/mol
Appearance	White to off-white crystalline powder
Molecular Formula	$C_4H_{10}O_2S_2$
Solubility	Freely soluble in water
pH	4.0 – 6.0 (1% solution at 25°C)
CAS Number	3483-12-3
Storage Condition	Store at 2–8°C in a tightly closed container. For long-term storage, keep at –20°C. Protect from moisture, heat, and air exposure.
Applications / Uses	Used in protein purification, enzyme stabilization, SDS-PAGE sample preparation, reduction of disulfide bonds, nucleic acid extraction, molecular biology, and biochemical research.
Safety	

Harmful if swallowed or inhaled. May cause irritation to skin, eyes, and respiratory tract. Use appropriate PPE including gloves, lab coat, and safety glasses. Handle in a well-ventilated area.