

# DEPC-Treated Water

Rev 12/20

**ALTERNATE NAMES:** RNase- and DNase-free water, RNase-free water, Molecular Biology Grade water, DEPC Water, Sterile water

**CATALOG #:** M1500-100 100 ml  
M1500-1000 1 L

**APPEARANCE:** Clear, Colorless liquid

**FEATURES:**

- Ready-to-use Solution
- For RNA experiments
- RNase and DNase Free
- Molecular Biology Grade

**FORMULATION:** 0.1 % v/v Diethyl Pyrocarbonate (DEPC) in water

**DESCRIPTION:** DEPC is a non-specific inhibitor of Ribonucleases (RNases). To reduce degradation of RNA in experiments, water is treated with DEPC. The concentration of DEPC is 0.1%. Ultra-pure molecular biology grade water is treated with DEPC followed by auto-claving. Autoclaving inactivates DEPC by causing hydrolysis of DEPC and release of by-products ethanol and carbon-dioxide.

DEPC modifies enzymes containing -NH, -SH, or -OH groups in their active sites. DEPC particularly reacts with Cys, His, Lys, Ser and Tyr residues of proteins. DEPC has a half-life of approximately 30 min in water. DEPC-Treated Water (0.1%) can be used with buffers such as PBS and MOPS but cannot be used with the buffers Tris and HEPES. Tris and HEPES make DEPC unavailable to inactivate RNase. DEPC-treated water should not be added to aqueous solutions of ammonia as it will result in the formation of urethane, a possible carcinogen.

**APPLICATIONS:** qPCR, Real-Time RT-PCR, cDNA synthesis and RNase protection assays

**STORAGE TEMPERATURE:** Room Temperature. Avoid long exposure to UV light.

**HANDLING:** Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

## RELATED PRODUCTS:

RNase Activity Detection/Quantification Assay Kit (Fluorometric) (Cat. No. K934)  
RNA Purification Kits (Cat. Nos. K1337, K1351, K1373, K1374, K1418, K1419)  
RNaseOFF ribonuclease Inhibitor (Cat. No. M1238)  
ToxOut™ Endotoxin Free Water (Cat. No. 7938)  
Phosphate Buffered Saline (PBS 10X) (Cat. No. 2113)

**DISCLAIMER:** *FOR RESEARCH USE ONLY! Not to be used on humans.*