

Is your water giving you the best results?

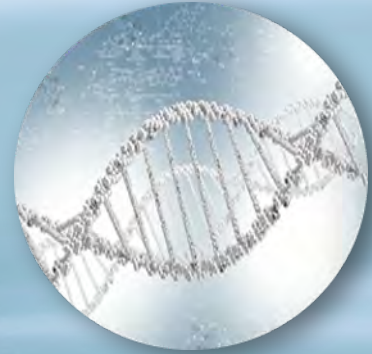
Select the proper grade water for your application.



Cell Culture, WFI Quality

Use for preparing cell culture media, wash solutions, and buffers

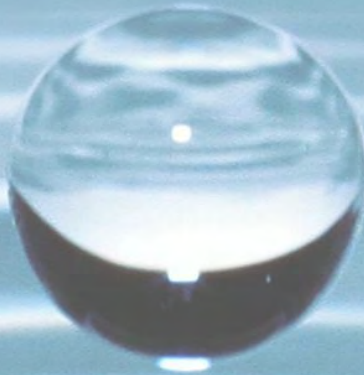
QBI # 118-162



Molecular Biology

Use for molecular biology applications, reagent preparation, glass and plastic rinsing

QBI # 351-029



DEPC-Treated

Use in applications requiring nuclease-free reagents or to prepare molecular biology grade reagents

QBI # 351-068



Endotoxin-Free

Use to prepare solutions for transfection, transformation, cell culture, rinsing and washing in pyrogen-free conditions

QBI # 118-325



PCR Qualified

Water free of nuclease, protease, and DNA (human, mouse, rat). Tested by PCR reaction

QBI # 351-161

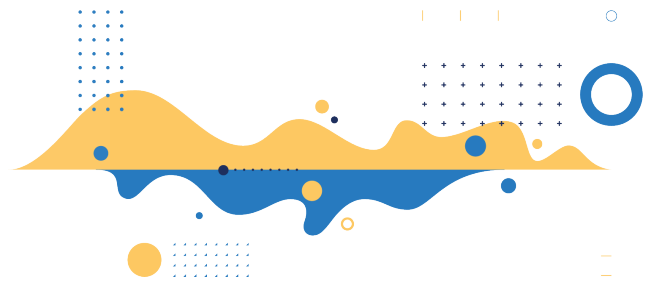


Quality Biological™

qualitybiological.com

Ultra-pure water is the foundation of all QBI products.

Our grades of ultra-pure water are tested for application-specific criteria so you get the best results.

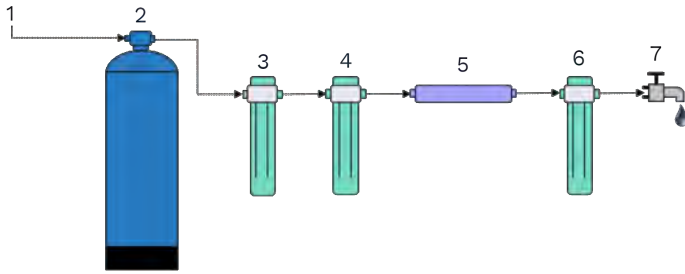


Water Grade	Product Group	Endotoxin	Mycoplasma	Cytotoxicity	DNase	RNase	Protease	TOC	Conductivity	Sterility Testing
Cell Culture WFI Quality*	118-162	✓	✓	✓				✓	✓	✓
Endotoxin Free**	118-325	✓	✓	✓	✓	✓	✓			✓
Molecular Biology	351-029				✓	✓	✓			✓
PCR Qualified	351-161				✓	✓	✓			✓
DEPC Treated	351-068				✓	✓	✓			✓

* Water, Cell Culture, WFI Quality is tested to meet the specifications found in the USP monograph for Water for Injection (WFI) for endotoxin, TOC, and conductivity. This water is only intended for research and further manufacturing use, not for diagnostic or therapeutic use.

** < 0.005 EU/mL

A Typical Ultra-Pure Water System



- 1 Incoming **Feed Water**
- 2 **Water Softener** for removal of dissolved materials
- 3 **Reverse Osmosis** removes 95-99% of contaminants
- 4 **Deionization** for removal of positive and negative ions
- 5 **UV light** disinfects and inactivates microorganisms
- 6 **Ultrafiltration** for particle removal based on filter pore size
- 7 **Ultrapure water** for use

Properties of Water

Empirical Formula	CAS Number	Molecular Weight	Density @ 25 °C
H ₂ O	7732-18-15	18.02	1.00 g/mL

Critical Criteria

Ultrapure Water - The highest purity water, suitable for most stringent analytical requirements such as HPLC, Mass Spec, biotechnology applications, and trace analysis.

Endotoxin - A pyrogen that induces inflammation in higher organisms. A component of the lipopolysaccharide (LPS) complexes making up the outer cell wall. Endotoxins are shed by bacteria when they are actively growing or when they die.

Mycoplasma - Refers to the type of bacteria that lack a cell wall and are a common contaminant for cell culture media.

Cytotoxicity - Is used to identify the presence of compounds that might pose a risk to cell proliferation.

DNase, RNase, and Protease absence in water is important in preventing the degradation of DNA, RNA, and proteins.

