Microzone Product Datasheet

Product code: 5JWA-50 Lot Number:

Just Water—Molecular Grade Water

P. Code	Compents	Component	Description	Lot Number	Expiry
5JWA-50	50 x 1 mL	Just Water (Molecular grade water)	Aliquoted, quality controlled, nuclease free, molecular grade water.		

Applications

- PCR (Polymerase Chain Reaction)
- qPCR (Quantitative PCR)
- RT-PCR (Reverse Transcription PCR)
- Sequencing
- Cloning
- Molecular biology research and diagnostics

Product Description

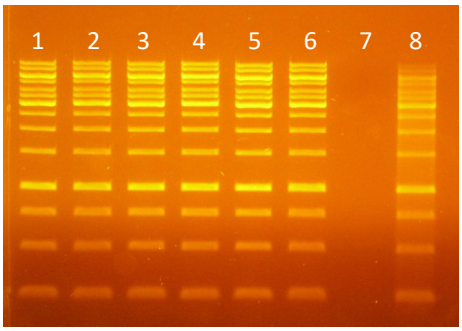
Just Water is a premium-grade molecular biology water perfect for use in all PCR or RT-PCR amplifications and other molecular biology applications when high quality water is needed. Just Water ensures reliable and reproducible results in sensitive molecular biology experiments, providing scientists with peace of mind.

Quality Control

Each lot of Just Water is functionally tested for prokaryotic as well as eukaryotic genomic DNA contamination to minimize the risk of false positive signals in PCR, qPCR and RT-qPCR applications. Just Water is also rigorously tested for degrading enzymes, such as DNase, RNase, endonuclease and nickases which can interfere with amplification techniques. Additionally, UltraViolet–Visible spectrometry is also performed to guarantee maximum water quality and purity.

Key Features

- Ultra-pure water for sensitive molecular biology applications
- Eliminates the risk of contamination from nucleases and PCR inhibitors
- 1 mL tube format removes possibility of bulk contamination
- Reliable and consistent performance
- Quality controlled tested for PCR and molecular biology applications
- Manufactured under stringent quality standards
- Provides researchers with peace of mind for critical experiments.



Just water DNase activity QC test. Agarose gel electrophoresis showing incubation of 1 µg of 1 Kb ladder with Just Water for 16 hours at 37°C. Lanes 1-5: various Just Water batches, 6: negative control, 7: positive control (DNase 0.02 U/µL), 8: positive control (DNase $2x10^{-8}$ U/µL). Just water shows no DNase activity giving confidence in PCR reactions.

Protocol

This protocol is for dye based PCR utilising Just water for reaction set up.

Thaw all reagents completely and mix well before use.

Prepare a master mix as described in the table below. This reaction can be scaled according to the quantity of reactions required.

Components	Volume
2X MegaMix Emerald qPCR Mastermix with UNG	10 µL
20X RT/RI Enzyme Mix	1 µL
Primer mix	x µL
Template	y µL
Just Water	make up to 20 µL

Mix gently, avoiding bubbles, centrifuge if necessary.

Include a no template control and positive control as required.

Thermocycling

Transfer the reactions to the thermal cycler and set as follows:

Cycles	Temperature	Time
1	50°C	10 mins
1	95°C	2 min
40	95°C	3 sec
	60°C	20 sec

Annealing temperature (60°C) may require optimisation depending on the specific primers in use.

For research use only

Product Handling

Storage

To ensure the quality of the product until the expiry date keep at the recommended storage temperature and limit exposure to light.

Contamination Control

To prevent erroneous results ensure work environment is free of contamination by cleaning your workstation and equipment with a DNA decontaminant daily, wear gloves, use sterile tubes and filter pipette tips.

Simple | Effective | Efficient

Version 2.01

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