

Product Information

Phosphate Buffered Saline

DNase free, microbial DNA free, 1X solution, pH 7.5

MBD0058

Product Description

Microbiome research has been revolutionized by the widespread adoption of culture-independent techniques, such as next generation sequencing of the 16S rRNA gene and metagenomics. A major problem of these sequence-based approaches is DNA contamination during sample preparation.¹ Therefore, DNA extraction reagents free of DNA contaminants are essential.

1× Phosphate Buffered Saline (PBS) is widely used in various applications, such as washing cells or diluting enzymes, among other applications, to maintain a constant pH and osmotic status. This PBS product undergoes strict quality control testing to ensure the absence of detectable levels of contaminating microbial DNA and DNase.

This PBS is recommended for resuspension of either MetaPolyzyme, DNA free (Cat. No. [MAC4LDE](#)), or MycoPolyzyme (Cat. No. [SAE0200](#)). These enzyme mixtures are used to improve cell lysis. By using the convenient ready-made (1×) PBS, DNA contamination from workflow reagents is minimized.

The formulation for this product is as follows:

- 137 mM NaCl
- 2.7 mM KCl
- 12.5 mM Na₂HPO₄
- 1.8 mM KH₂PO₄

Features and Benefits

- Ready-made solution
- Convenient 1 mL aliquots in tubes suitable for UV irradiation
- Suitable for resuspending either MetaPolyzyme, DNA free ([MAC4LDE](#)) or MycoPolyzyme ([SAE0200](#)) preparations used before DNA extraction
- Microbial DNA-free for improved DNA analysis, especially important for low biomass samples
- DNase-free
- Checked for both prokaryotic and eukaryotic DNA contamination using 35 cycles of PCR

Precautions and Disclaimer

This product is for R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store this product refrigerated (2-8 °C).

Preparation Instructions

The product is provided as a convenient, ready-made solution. No preparation or filtering is necessary before use.

After opening, it is recommended to UV-irradiate the tube and the remaining contents before re-use.

References

1. Salter, S. J. *et al.*, Reagent and laboratory contamination can critically impact sequence-based microbiome analyses. *BMC Biol.*, **12**, 87 (2014).

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