Phosphate-Buffered Saline (PBS) Solution

Phosphate-buffered saline (PBS) is a widely used buffer solution in biological and chemical research. It plays a crucial role in maintaining the pH balance and osmolarity during various experimental procedures, including tissue processing and cell culture. Our PBS solution is meticulously formulated with high-purity ingredients to ensure stability and reliability in every experiment. The osmolarity and ion concentrations of our PBS closely mimic those of the human body, making it isotonic and non-toxic to most cells.

Composition of Our PBS Solution

Our PBS solution is a pH-adjusted blend of ultrapure-grade phosphate buffers and saline solutions. At a 1X working concentration, it contains:

- 8000 mg/L Sodium chloride (NaCl)
- 200 mg/L Potassium chloride (KCl)
- 1150 mg/L Sodium phosphate dibasic anhydrous (Na_2HPO_4)
- 200 mg/L Potassium phosphate monobasic anhydrous (KH_2PO_4)

This composition ensures an optimal pH and ionic balance, suitable for a wide range of biological applications.

Applications of Our PBS Solution

Our PBS solution is ideal for various applications in biological research. Its isotonic and non-toxic properties make it suitable for substance dilution and cell container rinsing. PBS solutions containing EDTA are effective for disengaging attached and clumped cells. However, divalent metals such as zinc should not be added to PBS, as this can cause precipitation. In such cases, Good's buffers are recommended. Additionally, our PBS solution is an acceptable alternative to viral transport medium for the transport and storage of RNA viruses, including SARS-CoV-2.

Quality Control

- Sterile-filtered

Storage and Shelf Life

- Store at +2°C to +25°C, protected from light.
- Once opened, store at 2°C to 25°C and use within 24 months.

Shipping Conditions

- Ambient temperature

Maintenance

- Keep refrigerated at +2°C to +8°C in the dark. Avoid freezing and frequent warming to +37°C, as it reduces product quality.
- Do not heat the medium beyond 37°C or use uncontrolled heat sources such as microwave appliances.
- If only part of the medium is to be used, remove the required amount and warm it to room temperature before use.

Composition

Category	Components	Concentration (mg/L)
Salts	Potassium chloride	200

	Potassium phosphate monobasic anhydrous	200
	Sodium chloride	8000
	Sodium phosphate dibasic anhydrous	1150