PRODUCT SPECIFICATION SHEET

10X PBS, pH 7.4 Solution

Catalog Number: P014-0500 **Size:** 500 mL **Form:** Liquid, ready-to-dilute stock

1. Product Description

CELLPICK 10X Phosphate-Buffered Saline (PBS), pH 7.4 is a concentrated, premium-grade buffering solution essential for a vast array of cell biology, biochemistry, and molecular biology applications. As an isotonic and non-toxic buffer, it flawlessly mimics the physiological osmolarity and ion concentration of the human body when diluted, ensuring maximum cell viability and preserving native protein structures during rigorous experimental procedures.

This 10X master stock is meticulously formulated using high-purity raw materials. By utilizing this pre-mixed concentrate, researchers save valuable preparation time and eliminate inconsistencies associated with manual weighing and pH adjustment. The 500 mL packaging provides a convenient and practical format for benchtop reagent preparation and routine cell culture in standard research laboratories.

2. Specifications

Concentration	10X
Composition	1.35 M NaCl, 27 mM KCl, 43 mM Sodium Phosphate (dibasic), 14 mM Potassium Phosphate (monobasic)
pH	7.4 ± 0.1 (upon dilution to 1X working concentration at 25°C)
Appearance	Clear, colorless liquid
Storage Conditions	2–8°C (Refrigerated)

3. Recommended Applications & Usage

PBS is the universal physiological buffer for life science research. Key applications include washing cell cultures and tissue samples, diluting primary and secondary antibodies for Western Blotting and ELISA, and acting as a base solvent for custom reagent preparation.

Usage (Dilution): This product is a 10X concentrated stock and must be diluted prior to use. To prepare a standard 1X PBS working solution, combine 1 part of 10X PBS with 9 parts of sterile distilled or deionized water (e.g., mix 50 mL of 10X PBS with 450 mL of water). Invert gently to ensure thorough mixing. No further pH adjustment is typically required.

4. Ordering Information

Catalog Number	Product Name	Packaging Unit
P014-0500	10X PBS, pH 7.4 Solution	500 mL