

Product Information

Phosphate-Buffered Saline (PBS) is an isotonic, balanced salt solution containing Sodium chloride, Sodium phosphate and Potassium phosphate. PBS closely mimics the pH, osmolality and ion concentrations of the human body. Since it is nontoxic to cells, it is extensively used for cell culture rinsing and other preparations that might leave a residue.

RBP027401 is formulated without Calcium and Magnesium for rinsing chelators from cell culture before dissociation.

Storage temperature	15-30°C
Shelf life	24 months

Composition

Components	Concentration (mg/L)
Potassium phosphate monobasic	144
Sodium phosphate dibasic heptahydrate	795
Sodium chloride	9000

Applications

PBS is widely used in cell culture, molecular biology and biochemistry applications as it can maintain physiological pH and osmolality which is crucial for preserving cell viability and function.

Quality Control

Appearance	Colourless, clear solution
pH	7.2-7.6
Osmolality	280–320 mOsm/kg
Sterility ¹	Sterile
Endotoxin ²	< 0.25 EU/ml
Salt toxicity test ³	Pass
Mycoplasma contamination ⁴	Negative

Note:

¹Sterility testing (bacterial and fungal) carried out in accordance with <USP 71 >

²Bacterial endotoxin testing carried out in accordance with < USP 85 >

³Salt toxicity test: Cells used: U937 cells; 1 × 10⁴ cells/well are seeded in control (complete media, RPMI 1640 + 10% FBS) and test (PBS) in a 96-well plate (in triplicates) and incubated at 37°C in a CO2 incubator for 1 hour and 8 hours. Cells are counted at each time point and % viability determined. The viability of cells in the test (PBS) wells at 1 hour should be ≥ 90% of the complete media control and at 8 hours should be ≥ 75% of the complete media control to be acceptable.

⁴Mycoplasma test carried out using a real time PCR-based kit.