

Product Information

Dulbecco's Phosphate-Buffered Saline (DPBS) is an isotonic, balanced salt solution containing Sodium chloride, Sodium phosphate, Potassium phosphate and Potassium chloride. DPBS is designed mainly for maintaining the physiology and morphology of mammalian cells. This product lacks Calcium and Magnesium ions in its composition, ensuring that it does not inhibit trypsin activity.

RBDP0101 is formulated with Potassium chloride and 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	200
Sodium phosphate dibasic heptahydrate	2160
Sodium chloride	8000
Potassium chloride	200

Applications

DPBS 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	7.0-7.6
Osmolality	260–320 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 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. Viability was determined at each time point. The viability of cells in the test wells at 1 hour should be ≥ 90% of the control and at 8 hours should be ≥ 75% of the control to be acceptable.

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