DPBS (10X)

(Dulbecco's Phosphate Buffered Saline, 10X)

Cat. No. CPD111

Without Calcium and Magnesium

1. Product Description

DPBS is a type of balanced salt solution that maintains pH and osmotic balance while providing water and inorganic ions to cells. Therefore, it can be used in a wide range of cell culture applications, including cell washing, transport, short-term storage, dilution, and dissolution of other reagents. Depending on the experimental requirements, researchers must choose whether calcium and magnesium are needed. This product is a 10-fold concentrated solution and must be diluted with Water (Cell Culture Grade) before use.

2. Composition

Concentration: mg/L

Components	mg/L
$CaCl_2$ (Anhydrous)	—
KCl	2000
KH_2PO_4 (Anhydrous)	2000
$MgCl_2 \cdot 6H_2O$	—
NaCl	80000
Na_2HPO_4 (Anhydrous)	11440

3. Product Quality Specifications

Appearance	pH	Osmolality (at 1X)	Sterility
Colorless clear liquid	pH 6.8 ± 0.3	284 ± 14 mOsmol/kg H_2O	Sterile

4. Storage Conditions and Precautions

Store at room temperature (15–30°C) protected from direct sunlight. The expiration date is indicated on the product label; do not use expired products. Product degradation may appear as precipitates, floating particles, turbidity, or color change; discard if any are observed. Long-term storage at low temperatures or the addition of extra substances may cause precipitation or degradation.

5. Usage Instructions and Precautions

This product is a sterile solution. Open the cap only in a sterile environment (e.g., a clean bench) using aseptic technique. It is recommended to use the entire contents after opening; otherwise, aliquot into a suitable sterile container and store at room temperature (15–30°C).