

**Product Name**

Name: Dulbecco's Phosphate Buffered Saline (DPBS), 10X Conc., without Calcium, Magnesium

Cat. No.: C3592-0500

Size: 500 mL

**Product Description**

All culture media have a basis of a synthetic mixture of inorganic salts known as the physiological or balanced salt solution (BSS). All the physiological salt solutions have been derived from the salt solution originally described by Sydney Ringer (1885). The first balanced salt solution developed specifically for supporting the metabolism of mammalian cells was Tyrode's solution. Since then, many modifications have been done to obtain better buffering salt solutions and to prevent calcium precipitation.

The function of a salt solution is:

- To maintain the medium within the physiological pH range.
- To maintain intracellular and extracellular osmotic balance.

Dulbecco's Phosphate Buffered Saline or DPBS may be modified by adding glucose to serve as an energy source. It is most commonly used for tissue disaggregation and monolayer dispersal since the presence of calcium and magnesium ions may hinder trypsin activity.

**Composition**

Ingredients	mg/L	Ingredients	mg/L
<b>INORGANIC SALTS</b>			
Disodium hydrogen phosphate	1150.000	Sodium chloride	8000.000
Potassium chloride	200.000	Potassium phosphate, monobasic	200.000

**Storage and Stability**

The product should be kept at **15 - 30°C**.

The product is **light-sensitive** and therefore should not be left in the light.

Shelf life: 24 months from date of manufacture.

**Procedure**

1. Take a bottle and read the label.
2. Ensure that the cap of the bottle is tight.
3. Gently swirl the solution in the bottle to check if there is any precipitation or crystal.
4. Wipe the outside of the bottle with a disinfectant solution such as 70% ethanol.
5. Pipette out appropriate volume using aseptic/sterile technique under a laminar-flow culture hood.
6. Dilute the 10x concentrate to 1x before use.

**Quality Control**

DPBS 10X Conc., without Calcium, Magnesium is tested for sterility, pH, osmolality, and endotoxin concentration.

**Precaution and Disclaimer**

For research use only, not for clinical diagnosis, and treatment.