

Product Name

Name: Dulbecco's Phosphate Buffered Saline, with Calcium, Magnesium, without Phenol Red

Cat. No.: C3593-0100, C3593-0500

Size: 100 mL, 500 mL

Product Description

All media used in tissue culture consist of a synthetic mixture of inorganic salts known as 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 to be developed specifically for supporting the metabolism of mammalian cells was Tyrode's solution. Since then, many modifications have been introduced to become better buffering salt solutions and to prevent calcium precipitation, including Dulbecco's Phosphate Buffered Saline (DPBS), with Calcium, Magnesium.

The functions of the DPBS solution are:

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

Modified with a carbohydrate, such as glucose, to serve as an energy/carbon source.

Composition

| Ingredients | mg/L | Ingredients | mg/L |
|--------------------------------|----------|--------------------------------|----------|
| INORGANIC SALTS | | | |
| Calcium chloride dihydrate | 133.000 | Potassium chloride | 200.000 |
| Disodium hydrogen phosphate | 1150.000 | Potassium phosphate, monobasic | 200.000 |
| Magnesium chloride hexahydrate | 100.000 | Sodium chloride | 8000.000 |

Storage and Stability

The product should be kept at **2 - 8°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.
4. Wipe the outside of the bottle with a disinfectant solution such as 70% ethanol.
5. Take out appropriate volume of the product using aseptic/sterile technique under a laminar-flow culture hood.

Quality Control

DPBS With Calcium, Magnesium is tested for sterility, pH, osmolality, and endotoxin concentration.

Precaution and Disclaimer

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