

## Technical Data Sheet

Date: 07/03/12

### Dulbecco's Phosphate Buffered Saline 10X w/ Calcium w/ Magnesium

CAT No : XC-S2067

<b>Theoretical pH:</b>	3.3 ± 0.4
<b>Osmolality:</b>	>1600 mOsm/kg
<b>Colour:</b>	Clear colourless solution
<b>Storage conditions:</b>	+20°C
<b>Shelf life:</b>	48 months
<b>Sterility tests:</b>	- Bacteria in aerobic and anaerobic conditions - Fungi and yeasts
<b>Endotoxin:</b>	< 1 EU/ml (<0.1 ng/ml)
<b>Composition:</b>	Available on request

#### Recommended use:

Use aseptic techniques when handling this buffer.

Product is provided for laboratory use only and not for drug, human or veterinary use.

#### Applications:

Dulbecco's Phosphate Buffered Saline (DPBS) is intended for use in the maintenance of mammalian cells where a chemically defined, balanced salt solution provides an environment that will maintain the structural and physiological integrity of cells in vitro. DPBS is commonly used in cell enumerations as a diluent, for rinsing cells and as a buffer in many chromatographic procedures.

#### Uses:

Supplements, such as antibiotics, should be added as sterile supplements to the buffer solution. Storage conditions and shelf life of the supplemented product will be affected by the nature of the supplements.

1. Dilute the 10X buffer 1:10 with cell culture grade water. Water temperature should be 15 to 30 °C. Do not heat water. Mix completely.
2. While stirring the solution, adjust the pH 6.9 -7.1 using 1N NaOH. For most cells and culture conditions, the optimal pH of this salt solution after filtration is 7.0-7.4
3. Add deionized or distilled water to the solution to bring it to the final volume. To avoid fluctuations in pH, keep the vessel closed until the solution is filtered.
4. Sterilize the solution using a 0.22 micron filter. A peristaltic pump or an inert gas such as nitrogen can be used to provide positive pressure at 3 – 15 psi. Do not use CO2 gas.
5. Sterile solutions should be dispensed aseptically into sterile containers. Store buffer solution at 15 to 30 °C.

#### Signs of Deterioration:

Buffer solution should be clear and free of particulate and flocculent material.

Do not use if buffer solution is cloudy or contains precipitate.

Other evidence of deterioration may include degradation of physical or performance characteristics.