Hank's Balanced Salt Solution (HBSS), with calcium, magnesium, phenol red

Cat. No.: PB180324

Size: 500mL

General Information

Product Form	Liquid
Concentration	1×
pH	7.0-7.4
D-Glucose	1000 mg/L
$NaHCO_3$	350 mg/L
Phenol red	10 mg/L
$CaCl_2$ (anhydrous)	140 mg/L
$MgCl_2 \cdot 6H_2O$	100 mg/L
$MgSO_4 \cdot 7H_2O$	100 mg/L
Storage	2-30°C
Shipping	Room Temperature
Expiration date	36 months

Background

Balanced Salt Solution (Physiological Solution) have the properties of buffer solution (regulate pH), normal saline (maintain osmotic pressure) and culture medium (provide nutrition). It can meet the basic needs of survival and metabolism of tissues, organs or cells in vitro. A small amount of phenolic red was added to some equilibrium salt solutions to indicate the pH change of the solution.

Hank's Balanced Salt Solution (HBSS) is one of the commonly used phosphate buffers in cell separation or culture. The main components are NaCl, KCl, KH_2PO_4, Na_2HPO_4, $NaHCO_3$, $CaCl_2$, $MgCl_2$, $MgSO_4$ and glucose. HBSS is often used to rinse tissue or cells, to transport cells or tissues, to prepare other reagents, to dilute the cells when counting the cells.

Notes

1. This product is only used for scientific research or further research, not for diagnosis and treatment.
2. This product is sterilized by 0.1 μm filtration.
3. It is necessary to pay attention to the aseptic operation and avoid the contamination.
4. Calcium and magnesium ions in this solution may cause slight precipitation, which typically redissolves upon warming in a water bath. If substantial precipitate persists, discard the solution.
5. Hank's balanced salt solution contains low levels of $NaHCO_3$ and lacks sufficient buffering capacity for 5% CO_2 conditions; the pH will rapidly drop if placed in a CO_2 incubator. Use only under ambient CO_2 conditions.