

## Hanks Balanced Salts Solution (HBSS) 10X

w/o Calcium w/o Magnesium w/o Sodium Bicarbonate w/o Phenol Red

**CAT N°:** XC-S2062

**Storage conditions:** Room temperature

**Shelf life:** 48 months

**Composition:** Displayed on website; also available on request

**Colour:** colourless, clear solution

**pH:**  $5.9 \pm 0.5$

**Osmolality:** >1600 mOsm/kg

**Endotoxin:** <1 EU/ml

**Sterility tests:**

- Bacteria in aerobic and anaerobic conditions
- Fungi and yeasts

**Cell Growth test:** Not applicable

**Other tests:** Not applicable

**Recommended use:**

- Respect storage conditions of the product
- Do not use the product after its expiry date
- Store product in an area protected from light (not necessary for saline solutions).
- Manipulate the product in aseptic conditions (e.g.: under laminar air flow)
- Wear clothes adapted to the manipulation of the product to avoid contamination (e.g.: gloves, mask, hygiene cap, overall...)

The product is intended to be used in vitro for research or further manufacturing only and not for use as an Active Pharmaceutical Ingredient or food or animal feed.

**Application:**

Hanks' Balanced Salt Solution (HBSS) 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*.

In summary, the roles of a balanced salt solution are :

- maintenance of intra and extra cellular osmotic balanced
- provision of water and inorganic ions essential for cells metabolism
- provision of energy for cells metabolism thanks to glucose
- buffer effect to maintain the environment in physiological conditions of pH (7.2 – 7.6)

Hanks' salts are designed for maintenance of cells in ambient (non CO<sub>2</sub>) atmospheric conditions.

HBSS modified (without calcium, without magnesium) is frequently used to wash and resuspend cells during the dissociation process, where the presence of calcium and magnesium can inhibit the enzymatic activity (trypsin).

**Uses:**

Use this medium diluted at 1 :10 with cell culture grade water.

After dilution and before use, add 4.7 ml of a sodium bicarbonate solution at 7.5% (BioSera CAT N°: LM-S2046) per litre of solution.

Supplements, such as antibiotics or sodium bicarbonate should be added as sterile supplements to the medium. Storage conditions and shelf-life of supplemented product will be affected by the nature of the supplements.

**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.

**Remarks:** Not applicable