



Hanks' Balanced Salt Solution 1X

With Sodium bicarbonate
Without Phenol red

Product Code: TL1010

Product Description:

All media used in tissue culture have a basis of a synthetic mixture of inorganic salts known as a 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 done to obtain better buffering salt solutions and to prevent calcium precipitation.

The function of a salt solution is:

- To maintain the medium within physiological pH range.
- To maintain intracellular and extra cellular osmotic balance.
- Modified with a carbohydrate, such as glucose serves as an energy source for cell metabolism.

Hanks' balanced salt solution is designed to equilibrate with air, hence does not require CO₂ air mixture.

TL1010 is Hanks' balanced salt solution with sodium bicarbonate. It is designed for use with cells maintained in less CO₂ environment or CO₂ free environment. It does not contain phenol red.

Composition:

Ingredients	mg/L
INORGANIC SALTS	185.410
Calcium chloride dihydrate	48.000
Disodium hydrogen phosphate	97.720
Magnesium sulphate anhydrous	

Potassium chloride	400.000
Potassium dihydrogen phosphate anhydrous	60.000
Sodium bicarbonate	350.000
Sodium chloride	8000.000
OTHERS	
D-Glucose	1000.000

Quality Control:

Appearance

Colorless, clear solution

pH

7.10 -7.70

Osmolality in mOsm/Kg H₂O

265.00 -305.00

Sterility

No bacterial or fungal growth is observed after 14 days of incubation, as per USP specification.

Toxicity test

Passes

Endotoxin Content

NMT 1EU/ml

Storage and Shelf Life:

Store at 15-30 °C away from bright light.

Shelf life is 24 months.

Use before expiry date given on the product label.

Disclaimer :

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