



Earle's Balanced Salt Solution 1X

With Sodium bicarbonate
Without Calcium, Magnesium and Phenol red

Product Code: TL1107

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.

Earle's balanced salt solution is designed to equilibrate with a 5% CO₂ in air mixture. TL1107 is Earle's balanced salt solution with sodium bicarbonate hence requires the cells to be grown in a 5% CO₂ environment. It does not contain calcium, magnesium and phenol red.

Composition:

Ingredients	mg/L
INORGANIC SALTS	
Potassium chloride	400.000
Sodium bicarbonate	2200.000
Sodium chloride	7700.000
Sodium dihydrogen orthophosphate	122.000
Disodium hydrogen phosphate	335.000
OTHERS	
D-Glucose	1000.000

Quality Control:

Appearance

Colourless, clear solution

pH

7.00 -7.60

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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