

Earle's Balanced Salt Solution 10X

With Phenol red

Without Sodium bicarbonate

Product Code: TL1020

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. TL1020 is 10X Earle's balanced salt solution with phenol red. It does not contain sodium bicarbonate. It is designed for use with cells maintained in 5% CO₂ environment.

Composition :

Ingredients	mg/L
INORGANIC SALTS	
Calcium chloride dihydrate	2650.000
Magnesium sulphate anhydrous	977.200
Potassium chloride	4000.000
Sodium chloride	68000.000
Sodium dihydrogen phosphate anhydrous	1220.000
OTHERS	
D-Glucose	10000.000
Phenol red sodium salt	110.000

Directions :

Add 29.3ml of 7.5% sodium bicarbonate solution (TCL013) in 970.7ml of 1X balanced salt solution prior to use.

Material required but not provided :

Sodium bicarbonate solution 7.5% (TCL013)

Quality Control:

Appearance

Orangish yellow colored, clear solution

pH at 10X

4.60 -5.20

pH at 1X

5.30 -5.90

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.

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Disclaimer :

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