



Krebs - Ringer Phosphate HEPES Buffer, pH 7.4

**With 20mM HEPES buffer, Calcium and Magnesium
Without Phenol red**

Product Code: TL1152

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.
- When modified with a carbohydrate such as glucose, it serves as an energy source for cell metabolism.

TL1152 is Krebs-Ringer Bicarbonate Buffer with 20mM HEPES buffer, Calcium and Magnesium. HEPES, a zwitterionic buffer having a pKa of 7.3 at 37°C prevents the initial rise in pH that tends to occur at the initiation of a culture and increases the buffering capacity of the medium. It does not contain phenol red.

Potassium chloride	350.385
Potassium dihydrogen phosphate	680.000
Sodium chloride	7947.000
OTHERS	
HEPES Free acid	4766.000

Quality Control:

Appearance

Clear, colourless solution

pH

6.80-7.40

Osmolality in mOsm/Kg H₂O

290.00 -330.00

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.

Composition:

Ingredients	mg/L
INORGANIC SALTS	
Calcium chloride dihydrate	147.010
Magnesium sulfate heptahydrate	120.370

Disclaimer :

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