

Technical Information

Krebs - Ringer Phosphate HEPES Buffer, pH 7.4 With 20mM HEPES buffer, Calcium and Magnesium Without Phenol red

Product Code: TL2152

Application: 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.

TL2152 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.

Composition**

Ingredients	mg / Litre
INORGANIC SALTS	
Calcium chloride dehydrate	147.010
Magnesium sulfate heptahydrate	120.370
Potassium chloride	350.385
Potassium dihydrogen phosphate	680.000
Sodium chloride	7947.000
OTHERS	
HEPES Free acid	4766.000

Quality control

Appearance

Coloured, clear 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.

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conforms solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate.
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