Tyrode's Balanced Salts 1X
With Sodium bicarbonate
Without Phenol red

Product Code: TL1012

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.

TL1012 is Tyrode's balanced salt solution with sodium bicarbonate. It does not contain phenol red.

Composition:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>mg/L</th>
</tr>
</thead>
<tbody>
<tr>
<td>INORGANIC SALTS</td>
<td></td>
</tr>
<tr>
<td>Calcium chloride dihydrate</td>
<td>265.000</td>
</tr>
<tr>
<td>Magnesium chloride anhydrous</td>
<td>46.900</td>
</tr>
<tr>
<td>Potassium chloride</td>
<td>200.000</td>
</tr>
<tr>
<td>Sodium bicarbonate</td>
<td>1000.000</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>8000.000</td>
</tr>
<tr>
<td>Sodium dihydrogen phosphate anhydrous</td>
<td>50.000</td>
</tr>
<tr>
<td>OTHERS</td>
<td></td>
</tr>
<tr>
<td>D-Glucose</td>
<td>1000.000</td>
</tr>
</tbody>
</table>

Quality Control:

Appearance
Colorless, clear solution

pH
7.60 - 8.20

Osmolality in mOsm/Kg H2O
270.00 - 310.00

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.

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