Dulbecco's Phosphate Buffered Saline 5X
With Calcium and Magnesium
Without Phenol red

Product Code: TL1028

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.

TL1028 is 5X Dulbecco's Phosphate Buffered Saline with calcium and magnesium. 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>665.000</td>
</tr>
<tr>
<td>Disodium hydrogen phosphate</td>
<td>5750.000</td>
</tr>
<tr>
<td>Magnesium chloride</td>
<td>500.000</td>
</tr>
<tr>
<td>Potassium chloride</td>
<td>1000.000</td>
</tr>
<tr>
<td>Potassium dihydrogen orthophosphate</td>
<td>1000.000</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>40000.000</td>
</tr>
</tbody>
</table>

Quality Control:
- **Appearance**: Colorless, clear solution
- **pH at 5X**: 4.00 - 4.40
- **pH at 1X**: 4.60 - 5.20
- **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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