Dulbecco's Modified Eagle Medium (DMEM)  
With L-Glutamine, 4.5gms Glucose per litre and Sodium bicarbonate  
Without Sodium pyruvate, Calcium chloride and D-Calcium Pantothenate  
1X Liquid Cell Culture Medium  

Product Code: AL231A  

**Product Description:**  
Dulbecco's Modified Eagle Medium (DMEM) is one of the most widely used modifications of Eagle's medium. DMEM is a modification of Basal Medium Eagle (BME) that contains four fold concentration of amino acids and vitamins. Additionally, the formulation also includes glycine, serine and ferric nitrate. The original formulation contains 1000mg/L of glucose and was originally used to culture embryonic mouse cells.  

DMEM high glucose is a further modification of original DMEM and contains 4500mg/L of glucose. The additional glucose has proved to be useful in cultivating various other cell lines including primary cultures of mouse and chicken cells as well as various normal and transformed cell lines.  

AL231A is DMEM with L-glutamine, 4.5gms per litre glucose and sodium bicarbonate. It does not contain sodium pyruvate, calcium chloride and D-calcium pantothenate. Users are advised to review the literature for recommendations regarding medium supplementation and physiological growth requirements specific for different cell lines.  

**Composition:**  

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>mg/L</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INORGANIC SALTS</strong></td>
<td></td>
</tr>
<tr>
<td>Ferric nitrate nonahydrate</td>
<td>0.100</td>
</tr>
<tr>
<td>Magnesium sulphate anhydrous</td>
<td>97.720</td>
</tr>
<tr>
<td>Potassium chloride</td>
<td>400.000</td>
</tr>
<tr>
<td>Sodium bicarbonate</td>
<td>3700.000</td>
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<tr>
<td>Sodium chloride</td>
<td>6400.000</td>
</tr>
<tr>
<td>Sodium dihydrogen phosphate anhydrous</td>
<td>109.000</td>
</tr>
<tr>
<td><strong>AMINO ACIDS</strong></td>
<td></td>
</tr>
<tr>
<td>Glycine</td>
<td>30.000</td>
</tr>
<tr>
<td>L-Arginine hydrochloride</td>
<td>84.000</td>
</tr>
<tr>
<td>L-Cystine dihydrochloride</td>
<td>62.570</td>
</tr>
<tr>
<td>L-Glutamine</td>
<td>584.000</td>
</tr>
<tr>
<td>L-Histidine hydrochloride monohydrate</td>
<td>42.000</td>
</tr>
<tr>
<td>L-Isoleucine</td>
<td>105.000</td>
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</tbody>
</table>

L-Leucine 105.000  
L-Lysine hydrochloride 146.000  
L-Methionine 30.000  
L-Phenylalanine 66.000  
L-Serine 42.000  
L-Threonine 95.000  
L-Tryptophan 16.000  
L-Tyrosine disodium salt 103.790  
L-Valine 94.000  

**VITAMINS**  
Choline chloride 4.000  
Folic acid 4.000  
Nicotinamide 4.000  
Pyridoxal hydrochloride 4.000  
Riboflavin 0.400  
Thiamine hydrochloride 4.000  
i-Inositol 7.200  

**OTHERS**  
D-Glucose 4500.000  
Phenol red sodium salt 15.900  

**Quality Control:**  

**Appearance**  
Orangish red colored, clear solution.  

**pH**  
7.00 - 7.60  

**Osmolality in mOsm/Kg H2O**  
330.00 - 370.00  

**Sterility**  
No bacterial or fungal growth is observed after 14 days of incubation, as per USP specification.  

**Cultural Response**  
The growth promotion capacity of the medium is assessed qualitatively by analyzing the cells for the morphology and quantitatively by estimating the cell counts and comparing it with a control medium.

Please refer disclaimer overleaf
Endotoxin Content
NMT 1EU/ml

Storage and Shelf Life:
Store at 2-8°C away from bright light.
Shelf life is 12 months.
Use before expiry date given on the product label.

Disclaimer:
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