

Shanghai Aladdin Biochemical Technology Co., LTD  
809 Chuhua Branch Road, Fengxian District, Shanghai 201400, China

## Certificate of Analysis

Date of Testing: 2025-07-03 16:22:39  
Date of Next Testing: 2028-07-02 16:22:39  
Product Name: **Magnesium chloride solution**  
CAS Number: 7786-30-3  
Specifications & Purity: UltraBio™, Suitable for molecular biology, Ultra pure, ~1 M in H<sub>2</sub>O  
Lot #: F2530185  
SKU #: **M434103**  
Version: **5**  
Analysis #: **530165**

| Parameter                             | Limit Values      | Result        |
|---------------------------------------|-------------------|---------------|
| Aluminium(Al)                         | 0-1 (ppm)         | 0.00000 ppm   |
| Barium(Ba)                            | 0-1 (ppm)         | 0.00000 ppm   |
| Bismuth(Bi)                           | 0-1 (ppm)         | 0.00000 ppm   |
| Cadmium(Cd)                           | 0-1 (ppm)         | 0.00000 ppm   |
| Calcium(Ca)                           | 0-10 (ppm)        | 2.00000 ppm   |
| Chromium(Cr)                          | 0-1 (ppm)         | 0.00000 ppm   |
| Cobalt(Co)                            | 0-1 (ppm)         | 0.00000 ppm   |
| Copper(Cu)                            | 0-1 (ppm)         | 0.00000 ppm   |
| Potassium(K)                          | 0-50 (ppm)        | 12.00000 ppm  |
| Iron(Fe)                              | 0-1 (ppm)         | 0.00000 ppm   |
| Lithium(Li)                           | 0-1 (ppm)         | 0.00000 ppm   |
| Manganese(Mn)                         | 0-1 (ppm)         | 0.00000 ppm   |
| Molybdenum(Mo)                        | 0-1 (ppm)         | 0.00000 ppm   |
| Sodium(Na)                            | 0-500 (ppm)       | 15.00000 ppm  |
| Nickel(Ni)                            | 0-1 (ppm)         | 0.00000 ppm   |
| Lead(Pb)                              | 0-1 (ppm)         | 0.00000 ppm   |
| Strontium(Sr)                         | 0-1 (ppm)         | 0.00000 ppm   |
| Zinc(Zn)                              | 0-1 (ppm)         | 0.00000 ppm   |
| Arsenic(As)                           | 0-0.1 (ppm)       | 0.00000 ppm   |
| Total sulfur as SO <sub>4</sub> (ICP) | 0-50 (ppm)        | 0.00000 ppm   |
| Uv-Abs. At 260 nm                     | 0-0.05            | 0.01500       |
| UV-ABS.at 280 nm                      | 0-0.03            | 0.00900       |
| Concentration(Titration)              | 0.97-1.03 (mol/L) | 1.00000 mol/L |
| Density(D <sub>20</sub> /4°C)         | 1.07-1.085        | 1.07200       |
| pH                                    | 5.0-7.5           | 6.40000       |
| Total Nitrogen                        | 0-2 (ppm)         | 2.00000 ppm   |

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| Parameter                               | Limit Values     | Result           |
|-----------------------------------------|------------------|------------------|
| Phosphate(PO <sub>4</sub> )             | 0-10 (ppm)       | 0.00000 ppm      |
| Appearance(M434103)                     | Colorless Liquid | Colorless liquid |
| Residue (filter test)                   | no residue       | no residue       |
| Dnases, Rnases, Proteases, Phosphatases | None Detected    | none detected    |

