

Calcium Chloride Solutions

Sterile-filtered
Endotoxin tested
Cell culture tested

Catalog Number **LS 019-01 (40 mg/mL)**

LS 019-02 (1.0 M)

Storage Temperature 2~8°C

Product Description

Calcium chloride is a commonly used reagent in biochemistry. Calcium plays important roles in many biological processes, including signal transduction, muscle contraction, and maintenance of cell membrane and cell wall stability. Extensive reviews of the experimental measurement of biological calcium have been published.

LS 019-01 contains 40.0 g/L CaCl₂ (anhydrous) in cell/tissue culture grade water (**LS016-01**).

LS 019-02 contains 140.7 g/L CaCl₂·2H₂O in cell/tissue culture grade water (**LS016-01**).

Storage/Stability

The concentrated Calcium chloride solutions should be stored at 2~8°C. Deterioration of the solution may be recognized by (1) precipitate or particulate matter throughout the solution, (2) cloudy appearance, (3) color change, and/or (4) pH change. Product label bears expiration date.

Molecular Weight

111.0 g/mol

Molecular Formula

CaCl₂

Precautions

For *In Vitro* Use Only

Product Profile

| | |
|------------|---|
| Appearance | Clear colorless solution |
| Endotoxin | ≤ 1.0 EU/ml |
| Sterility | Sterilized by 0.2 μm filtration system. Sterility tests are performed in accordance with protocols described in USP. |

References

The Biological Chemistry of the Elements, Frausto da Silva, J. J. R., and Williams, R. J. P., Clarendon Press (Oxford, UK: 1991), pp. 268-298.

Williams, R. J. P., in Calcium as a Cellular Regulator, Carafoli, E., and Klee, C., eds., Oxford University Press (New York, NY: 1999), pp. 3-27.

Cellular Calcium: A Practical Approach, McCormack, J. G., and Cobbold, P. H., eds., IRL Press (Oxford, UK: 1991).

Calcium Signaling Protocols, Lambert, D. G., ed., Humana Press (Totowa, NJ: 1999).