Magnesium chloride, Anhydrous

Product Number  M 8266
Store at Room Temperature

Product Description
Molecular Formula: MgCl₂
Molecular Weight:  95.21
CAS Number:  7786-30-3

Magnesium chloride is a widely used reagent in chemistry and molecular biology as a source of magnesium ion. Magnesium has a variety of biological roles in enzymology, cell membrane and wall structural integrity, muscle cell physiology, and nucleic acid structure.¹,² Magnesium is an essential co-factor in many enzymes, including deoxyribonuclease (DNAse), the restriction enzymes EcoRI and EcoRV, and Ribonuclease H.³,⁴ Magnesium also stabilizes polymeric nucleic acids such as transfer RNA and ribozymes.⁵

Conditions for optimal use of MgCl₂ in the polymerase chain reaction (PCR) have been investigated.⁵,⁷ The use of MgCl₂ in the trypsin-mediated proteolysis of the mammalian α-ketoglutarate dehydrogenase complex has been reported.⁸ A protocol that includes MgCl₂ for dideoxy-mediated sequencing reactions using bacteriophage T7 DNA polymerase has been published.⁹

Precautions and Disclaimer
For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions
This product is soluble in water (100 mg/ml), yielding a hazy, colorless solution.

References