



Magnesium Assay Kit

Product Information

Cat

Kit-2497

Cat.No.

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Product Overview

Magnesium (Mg) is one of the most abundant and essential minerals in mammals. Magnesium is involved in more than 300 biochemical reactions in the body and plays important roles in muscle and nerve functions, heart rhythm, immune system and bone formation. Magnesium deficiency may lead to nausea, fatigue, muscle contractions, hypocalcemia and hypokalemia. Simple, direct and automation-ready procedures for measuring magnesium concentration in biological samples are becoming popular in Research and Drug Discovery. Magnesium assay kit is designed to measure magnesium directly in biological samples without any pretreatment. A calmagite dye in the kit forms a colored complex specifically with magnesium. The intensity of the color, measured at 500 nm, is directly proportional to the magnesium concentration in the sample. The optimized formulation minimizes interference by potential substances.

Storage

4°C

Shipping

RT

Size

250 tests

Detection method OD500nm

Compatible Sample Types

Biological, food and beverage

Features & Benefits



Magnesium Assay Kit

Sensitive and accurate. Use as little as 5 μ L sample. Linear detection range 0.1 mg/dL (41 μ M) to 3 mg/dL (1.2 mM) Mg²⁺ in 96-well plate assay.

Simple and high-throughput. The procedure involves addition of two reagents and measuring OD_{500nm}. Can be readily automated as a high-throughput assay for thousands of samples per day. Improved reagent stability and versatility. The optimized formulation has greatly enhanced reagent and signal stability. Cuvet or 96-well plate assay.

Low interference in biological samples. Assays can be directly performed in serum and urine samples.

Assay time

10 min

Sensitivity

0.1 mg/dL (41 μ M)
