abcam

Product datasheet

Magnesium Assay Kit ab102506

5 References 4 Images

Overview

Product name Magnesium Assay Kit

Sample type Urine, Serum, Plasma, Other biological fluids, Tissue Extracts, Cell Lysate, Cell culture media

Assay type Quantitative

Sensitivity 40 µM

Range 2 μM - 15 μM

Assay time 0h 30m

Product overview Magnesium Assay Kit (ab102506) is a simple sensitive assay for quantitating magnesium in a

variety of biological samples. The kit takes advantage of the specific requirement of glycerol kinase for Mg2+. An enzyme linked reaction leads to formation of an intensely colored (λ max = 450nm) product whose formation is proportional to Mg2+ concentration. The linear range of the

assay is 2-15 nmoles with detection sensitivity \sim 40 μ M. Visit our **FAQs page** for tips and troubleshooting.

NotesThis product is manufactured by BioVision, an Abcam company and was previously called K385

Magnesium Colorimetric Assay Kit. K385-100 is the same size as the 100 test size of ab102506.

Magnesium is the 11th most abundant element by mass in the human body. Mg2+ is essential to

all living cells where it plays an important role in facilitating the processing of biological

polyphosphates like ATP, DNA, RNA and enzyme functions. Mg2+ is the metallic ion at the center of chlorophyll, and a common additive to fertilizers. Mg2+ compounds are used as laxatives,

antacids, and used to stabilize abnormal nerve excitation and blood vessel spasm i.e., eclampsia.

Platform Microplate reader

Properties

Storage instructions Store at -20°C. Please refer to protocols.

Components	100 tests	2000 tests
Developer Solution III	1 vial	2 vials
Magnesium Assay Buffer	1 x 25ml	20 x 25ml
Magnesium Enzyme Mix	1 unit	20 units

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Components	100 tests	2000 tests
Magnesium Standard	1 x 0.1ml	20 x 0.1ml

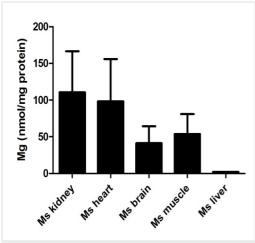
Relevance

Magnesium is the 11th most abundant element by mass in the human body. Magnesium is essential to all living cells where it plays an important role in facilitating the processing of biological polyphosphates like ATP, DNA, RNA and enzyme functions. Magnesium is the metallic ion at the center of chlorophyll, and a common additive to fertilizers. Magnesium compounds are used as laxatives, antacids, and used to stabilize abnormal nerve excitation and blood vessel spasm i.e., eclampsia.

Images

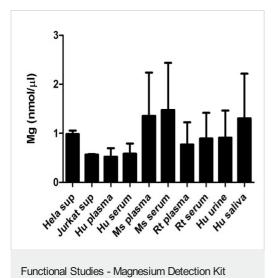
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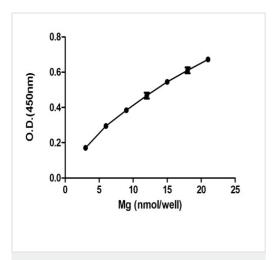


Functional Studies - Magnesium Detection Kit

Magnesium measured in mouse tissue lysates showing quantity (nmol) per mg protein of tested sample

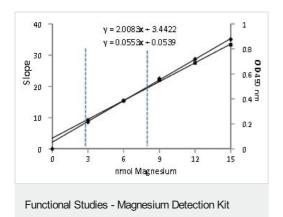


Magnesium measured in biological fluids showing quantity (nmol) per microliter of tested sample



Colourimetric standard curve : mean of duplicates (+/-SD) with background reads substracted





Magnesium standard curve: Assay is performed according to kit protocol. Vertical dotted lines indicate the lower and upper limits of normal serum Magnesium concentrations.

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