



Zinc Assay Kit

Product Information

Cat

Kit-2495

Cat.No.

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Product Overview

Zinc is an essential trace element and plays many key roles in metabolism. It is required for the activity of more than 300 enzymes, the structure of many proteins, and control of genetic expression. Zinc status affects basic processes of cell division, growth, differentiation, development, performance and aging through its requirement for synthesis and repair of DNA, RNA and protein. The common causes of zinc deficiency are low dietary intakes and low bioavailability. Clinical signs of zinc deficiency include acrodermatitis, low immunity, diarrhea, poor healing, stunting, hypogonadism, fetal growth failure, teratology and abortion. Zinc deficiency has now been recognized to be associated with many diseases such as malabsorption syndrome, chronic liver disease, chronic renal disease, sickle cell disease, diabetes, malignancy, and other chronic illnesses. Simple, direct and automation-ready procedures for measuring zinc concentration in biological samples are highly desirable in Research and Drug Discovery. zinc assay kit is designed to measure zinc directly in biological samples without any pretreatment. The present method utilizes a chromogen that forms a colored complex specifically with zinc. The intensity of the color, measured at 425 nm, is directly proportional to the zinc concentration in the sample.

Storage

4, -20°C

Shipping

RT

Size

250 tests



Zinc Assay Kit

Detection method OD425nm

Compatible Sample Types

Serum, plasma, urine, saliva, food, beverage and environment

Features & Benefits

Sensitive and accurate. Uses 50 μL samples. Linear detection range 0.12 μM (0.78 $\mu\text{g}/\text{dL}$) to 10 μM (65 $\mu\text{g}/\text{dL}$) zinc in 96-well assay format.

Simple and high-throughput. The procedure involves addition of a single working reagent and incubation for 30 min. 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. Cuvette or 96-well plate assay formats possible.

Low interference in biological samples. No pretreatments are needed.

Assay time

30 min

Sensitivity

0.78 $\mu\text{g}/\text{dL}$ (0.12 μM)
