

Sulfate Assay Kit

Product Information

Cat.No.

Kit-0809

Product Overview

Sulfate Assay Kit is a quantitative turbidimetric sulfate determination at 600 nm.

Description

INORGANIC SULFATE is one of the most abundant anions in mammalian plasma. Sulfate plays important physiological roles in activating and detoxifying xenobiotics, steroids, neurotransmitters, and bile acids. Sulfate is needed for the biosynthesis of glycosaminoglycans, cerebroside sulfate, and heparin sulfate. Undersulfation of cartilage proteoglycans has been associated with human inherited osteochondrodysplasia disorders. In mammals, sulfate homeostasis is regulated by the kidney. The majority of filtered sulfate is absorbed in the proximal tubules, and only 5-20% of the filtered load is excreted into the urine. Simple, direct and automation-ready procedures for quantitative determination of inorganic sulfate find wide applications in research and drug discovery. Sulfate assay kit is designed to measure sulfate concentration in biological fluids such as serum and urine. The improved method utilizes the quantitative formation of insoluble barium sulfate in polyethylene glycol. The turbidity measured between 540 and 610nm is proportional to sulfate level in the sample.

Applications

Direct Assays: inorganic sulfate in serum and urine. Pharmacology: effects of drugs on sulfate metabolism.

Usage

For research use only (RUO)

Storage

The kit is stored at room temperature. Shelf life of three months after receipt.

Kit Components

Sulfate Assay Kit

Reagent A 25 mL Reagent B 2.4 g powder TCA Reagent 25 mL Sulfate Standard 1 mL 60 mM

Detection method Colorimetric

Compatible Sample Types

Plasma, Serum, Urine

Features & Benefits

Sensitive and accurate. Detection range 0.02 mM (0.19 mg/dL) to 2 mM (19.2 mg/dL) sulfate in 96-well plate assay. Simple and high-throughput. The procedure involves addition of a single working reagent and incubation for 5 min.