

Certificate of Analysis

Product Name: Sulfate Assay Kit

Catalog No.: Z5030035

Shipping Condition: Room Temperature

Storage Condition: Store all reagents at room temperature

Shelf Life: Twelve months from the date of receipt under proper storage conditions

Description

INORGANIC SULFATE is one of the most abundant anions in mammalian plasma¹. 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 urine².

Simple, direct and automation-ready procedures for quantitative determination of inorganic sulfate find wide applications in research and drug discovery. BioChain¹ 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 glycol³. The turbidity which is measured as optical density between 540 and 610nm (recommended 600nm), is an accurate measure of the sulfate level in the sample.

Testing Data:

Duplicate assays for rat serum, fetal bovine serum, human serum, and human urine gave sulfate content of 1.54 ± 0.07 , 1.69 ± 0.09 , 0.48 ± 0.01 and 10.5 ± 0.09 mM (n = 2).

Components

1. One Kit
2. User Manual
3. Certificate of Analysis
4. SDS

FOR IN VITRO RESEARCH USE ONLY

APPROVED BY: _____

