CREATIVE BIOMART®
Assay Kit

Pyrophosphate Assay Kit

Product Information

Cat

Kit-0899

Common Name

Pyrophosphate

Cat.No. Kit-0899

Description

The Pyrophosphate Assay Kit provides a rapid and highly sensitive enzymatic assay for detecting free pyrophosphate in solution. In this assay the formation of a chromophoric product is detected spectrophotometrically.
See our complete line of Fluorescence Microplate assays.
• Sensitivity limit of 1 mM pyrophosphate (~0.2 µg/mL)
• Acommodates a pH range of 6.5 to 8.5
The Pyrophosphate Detection Kit provides a fast, convenient, and inexpensive spectrophotometric method for measuring the inorganic pyrophosphate produced by a number of biochemical reactions, such as DNA and RNA polymerizations, cyclic AMP formation by the enzyme adenylate cyclase, and the enzymatic activation of fatty acids to form their coenzyme A esters.
The Pyrophosphate Assay Kit is a modification of our Phosphate Assay Kit. In the presence of inorganic phosphate, the substrate 2-amino-6-mercapto-7-methylpurine ribonucleoside (MESG) is converted by the purine nucleoside phosphorylase (PNP) enzyme to ribose 1-phosphate and 2-amino-6-merc apto-7-methylpurine. The enzymatic conversion of MESG results in a shift in absorbance maximum from 330 nm to 360 nm. The Pyrophosphate Assay Kit includes the enzyme inorganic pyrophosphatase, which catalyzes conversion of pyrophosphate into two equivalents of phosphate. The phosphate is then consumed by the MESG/PNP reaction and detected by an increase in absorbance at 360 nm. Additional sensitivity is gained by the amplification of one molecule of pyrophosphate into two molecules of phosphate.

Storage

Tel: 1-631-559-9269 1-516-512-3133
Email:info@creative-biomart.org
Fax:1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

CREATIVE BIOMART®
Assay Kit

Pyrophosphate Assay Kit

Includes inorganic pyrophosphatase, 2-Amino-6-mercapto-7-methylpurine riboside (MESG), purine nucleoside phosphorylase (PNP), concentrated reaction buffer, Na2P2O7 standard, and detailed protocols for detecting and quantitating pyrophosphate.

Shipping

Room Temperature

Size

100 assays

Materials Required but Not Supplied

Spectrophotometer

Detection method Colorimetric

Tel: 1-631-559-9269 1-516-512-3133

Email:info@creative-biomart.org

Fax:1-631-938-8127

45-1 Ramsey Road, Shirley, NY 11967, USA