

ATP Colorimetric/Fluorometric Assay Kit

Product Information

Cat

Kit-1041

Common Name

ATP

Cat.No.

Kit-1041

Description

ATP is the primary energy currency of living systems. Virtually all energy requiring processes utilize the chemical energy stored in the phosphate bond of ATP. ATP is formed exclusively in the mitochondria and a variety of genetic diseases can affect ATP formation in the mitochondria. There are a number of commercially available ATP assays which detect femtomoles or less of ATP by measuring luminescence but these kits require specialized luminescence instrumentation and utilize luciferase which can be difficult to maintain in active form. The newly developed ATP Colorimetric and Fluorometric Assay kit is designed to be a robust, simple method which utilizes the phosphorylation of glycerol to generate a product that is easily quantified by colorimetric ($\lambda_{max} = 570$ nm) or fluorometric ($Ex/Em = 535/587$ nm) methods. The assay can detect as low as 50 picomol (1 μ M) of ATP in various samples. The kit provides sufficient reagents for 100 assays.

Applications

The assay can detect as low as 50 picomol (1 μ M) of ATP in various samples.

Storage

-20°C

Shipping

Gel Pack

Size

100 assays

ATP Colorimetric/Fluorometric Assay Kit

Kit Components

ATP Assay Buffer; ATP Probe (in DMSO); ATP Converter; Developer Mix (lyophilized); ATP Standard (1 μ mol; lyophilized)

Target Species

All

Detection method Absorbance (570 nm) or Fluorescence (Ex/Em 535/587 nm)

Features & Benefits

Simple procedure; takes less than 1 hour;

Fast and convenient;

Kit is designed to be a robust method which utilizes the phosphorylation of glycerol to generate a product that is easily quantified.