

Alkaline Phosphatase Colorimetric Assay Kit

Product Information

Cat.No.

Kit-0078

Product Overview

Alkaline Phosphatase Assay Kit is a colorimetric kinetic determination of serum alkaline phosphatase activity.

Description

Alkaline phosphatase (ALP) catalyzes the hydrolysis of phosphate esters in an alkaline environment, resulting in the formation of an organic radical and inorganic phosphate. In mammals, this enzyme is found mainly in the liver and bones. Marked increase in serum ALP levels, a disease known as hyperalkalinephosphatasemia, has been associated with malignant biliary obstruction, primary biliary cirrhosis, primary sclerosing cholangitis, hepatic lymphoma and sarcoidosis.

Applications

Direct Assays: ALP activity in serum, plasma and other sources. Characterization and Quality Control for ALP production. Drug Discovery: high-throughput screen for ALP inhibitors and evaluation of ALP inhibitors.

Usage

For research use only (RUO)

Storage

The kit is shipped at room temperature. Store pNPP Liquid at -20°C and other components at 4°C. Shelf life of 12 months after receipt.

Kit Components

Assay Buffer 50 ml, pH 10.5 Mg Acetate 1.5 mL, 0.2 M pNPP Liquid 600 µL, 1 M Calibrator 10 mL, Tartrazine

Detection method Colorimetric

Compatible Sample Types

Alkaline Phosphatase Colorimetric Assay Kit

Plasma, Serum

Features & Benefits

High sensitivity and wide linear range: Use 5 μ L serum or plasma sample. The detection limit is 2 U/L, linear up to 800 U/L. Homogeneous and simple procedure: Simple "mix-and-measure" procedure allows reliable quantitation of ALP activity within 5 minutes. Robust and amenable to HTS: All reagents are compatible with high-throughput liquid handling instruments.
