



## DATA SHEET

**Product: Alkaline Phosphatase Assay Kit**

**Catalog No.: Z5030033**

**Shipping Condition:** Room Temperature

**Storage Condition:** Store pNPP Liquid at -20°C and other components at 4°C

**Shelf Life:** 12 months from the date of receipt under proper storage conditions

### **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.

Simple, direct and automation-ready procedures for measuring ALP activity in serum are becoming popular in Research and Drug Discovery. Biochain's Alkaline Phosphatase Assay Kit is designed to measure ALP activity directly in biological samples without pretreatment. The improved method utilizes *p*-nitrophenyl phosphate that is hydrolyzed by ALP into a yellow colored product (maximal absorbance at 405nm). The rate of the reaction is directly proportional to the enzyme activity.

*p*-Nitrophenyl phosphate → *p*-nitrophenol + phosphate

### **Components**

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