

Alkaline Phosphatase Isoenzymes

Test ID: 231

CPT: 84075, 84080

Clinical Significance:

Alkaline phosphatase (ALP) is present in a number of tissues including liver, bone, intestine, and placenta. The activity of ALP found in serum is a composite of isoenzymes from those sites and, in some circumstances, placental or Regan isoenzymes. Serum ALP is of interest in the diagnosis of 2 main groups of conditions-hepatobiliary disease and bone disease associated with increased osteoblastic activity.

Arise in ALP activity occurs with all forms of cholestasis, particularly with obstructive jaundice. The response of the liver to any form of biliary tree obstruction is to synthesize more ALP. The main site of new enzyme synthesis is the hepatocytes adjacent to the biliary canaliculi.

ALP also is elevated in disorders of the skeletal system that involve osteoblast hyperactivity and bone remodeling, such as Paget's disease rickets and osteomalacia, fractures, and malignant tumors.

Profile Components:

Alkaline Phosphatase, Intestinal Isoenzymes, Bone Isoenzymes, Liver Isoenzymes, Placental Isoenzymes, Macrohepatic Isoenzymes



Labtech Diagnostics

Container:

Serum Separator Tube (SST®)

Transport Temperature:

Room temperature

Specimen:

Serum

Specimen Stability:

Room temperature: 7 days
Refrigerated: 7 days
Frozen: 14 days

Reject Criteria:

Patient not fasting; hemolysis;
citrate, oxalate, or EDTA
anticoagulated plasma

Days Performed:

Mon-Fri

Collection Instructions:

Patient Preparation

Patient should be fasting overnight. Patients who have B or O blood group and are secretors may have an elevated ALP about two hours after a fatty meal.

Separate serum from cells as soon as possible after the blood is allowed to clot.