
Alkaline Phosphatase(7100u/mg) Protein

产品编号: D-9410

CAS: 9001-78-9

保存条件: Store at 2-8°C.

产品介绍: Alkaline phosphatase is highly purified from calf intestine.

Alkaline phosphatase (ALP) removes phosphate groups from the 5' end of DNA and RNA, and from proteins, at high pH. Most mammals have 4 different isozymes: placental, placental like, intestinal and non tissue specific (found in liver, kidney and bone). Tissues with particularly high concentrations of ALP include the liver, bile ducts, placenta, and bone. Damaged or diseased tissue releases enzymes into the blood, so serum ALP measurements can be abnormal in many conditions, including bone disease and liver disease.

Typical uses in the lab for alkaline phosphatases include removing phosphate monoesters to prevent self-ligation, which is undesirable during plasmid DNA cloning. Another important use of alkaline phosphatase is as a label for enzyme immunoassays.

碱性磷酸酶 (ALP或AKP) 是广泛分布于人体肝脏、骨骼、肠、肾和胎盘等组织经肝脏向胆外排出的一种酶。

在免疫学研究方面, 已广泛应用AP 标记抗体进行酶联免疫荧光反应(E LISA)和Western 印迹分析, 即将A P 与显色剂或去磷酸化后能发光的底物相互作用来揭示靶与检测酶复合物的存在, 与辣根过氧化物酶相比, AP 用作标记酶的优点是稳定性高、灵敏度高, 缺点是成本高、标记困难。在生物化学和分子生物学方面, 用AP 催化除去DNA 分子的5' 末端磷酸基团以防止载体自连是基因克隆中的常规手段之一。