

What Is Alkaline Phosphatase? Alkaline phosphatase enzyme has thermal resistance greater than that of pathogen organisms commonly found in milk. The enzyme cleaves a phosphate group from the substrate, disodium phenyl phosphate, liberating phenol which then reacts with a color-producing compound to give a blue color. The sensitivity allows for the detection of approximately 0.1 % raw milk contamination in pasteurized milk or the equivalent (i.e. under-pasteurization). Complete pasteurization will inactivate the enzyme to below levels which are detectable by conventional methods. Alkaline Phosphatase (ALP) is an enzyme naturally present in all raw milk, which is used as an indicator of proper milk pasteurization. How Has Phosphatase Activity Been Determined???