

Fluorescent Phosphate Detection Kit

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CATALOG #
AAA52789

PRODUCT SYNONYMS

Fluorescent Phosphate; Fluorescent Phosphate Detection Kit; Fluoro Phosphate Detection Kit; Fluorescent Phosphate detection kit

PRODUCT SPECIFICATIONS

Excitation/Emission	535/585nm or Absorbance readout at 570nm
Method of Analysis	Fluorescence plate reader or spectrophotometer
Preparation and Storage	Store contents as labeled Shipping: Blue Ice/Gel Packs

ADDITIONAL INFORMATION

Related Product Information for Fluorescent Phosphate detection kit	This kit provides a simple, one-step fluorometric or colorimetric method for determination of phosphate in serum and plasma samples. The assay is based on an enzyme-coupled reaction that detects inorganic phosphate. Phosphorus is essential for multiple and diverse biological functions, including cellular signal transduction, mineral metabolism, and energy exchange. Although >80% of total body phosphorus is stored in bone and teeth, intracellular phosphorus exists in the form of organic compounds such as ATP and as free anions like H₃PO₄³⁻, which are commonly referred to as phosphate. Serum phosphorus primarily occurs in the form of inorganic phosphate, which is maintained within the physiological range by regulation of dietary absorption, bone formation, and renal excretion, as well as equilibrium with intracellular stores. Elevated levels of serum phosphate may be associated with a higher risk of death and adverse cardiovascular outcomes in people with prior myocardial infarction, and is the subject of large amount of research. Rapid and easy quantification of serum phosphate in experimental samples may prove clinically useful. The Fluorescent Phosphate Detection Kit provides a simple, one-step fluorometric or colorimetric method for determination of phosphate in serum and plasma samples. The assay is based on an enzyme-coupled reaction that detects inorganic phosphate. The substrate is converted to Hydrogen peroxide in presence of inorganic phosphate in a coupled enzymatic reaction. The Hydrogen Peroxide then reacts with the detection reagent in a 1:1 stoichiometry in presence of Horse Radish Peroxidase to produce the stable fluorescent product.
Product Categories/Family for Fluorescent Phosphate detection kit	Metabolic Assay

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/detection-kits/fluorescent-phosphate/52789>