



## Fluoro Phosphate Detection Kit

### Product Information

#### Cat.No.

Kit-0684

#### Product Overview

The Fluoro Phosphate detection kit utilizes a non-fluorescent detection reagent, which is reduced in an enzyme-coupled reaction to produce the stable fluorescent product. Assay readout can be fluorimetric (excitation 530-570nm and emission 585-600nm) or colorimetric (absorbance at 570nm).

#### Description

Phosphorus is essential for multiple and diverse biological functions, including cellular signal transduction, mineral metabolism, and energy exchange. 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.

#### Applications

Quantitation of phosphate anion in blood, plasma and serum samples.

#### Usage

1. For Research use only. Not for use in diagnostic procedures. 2. Practice safe laboratory procedures by wearing gloves, protective clothing and eyewear. 3. The reaction is not stable in the presence of thiols (DTT or 2-mercaptoethanol). Keep these reactants below 10 $\mu$ M. 4. Once the vial of the Detection Reagent is opened, it is important that low lighting conditions be used while aliquoting as well as performing the experiment. Direct and prolonged light exposure may increase the background, resulting in compromised linearity.

#### Storage

1. Long Term Storage: Store contents as labeled. 2. Upon Arrival: Various-Please see kit components above for specific storage conditions. 3. Store Part 1 of the kit frozen at -20°C upon arrival. 4. The Detection Reagent should be protected from light. 5. To avoid repeated freeze/thaw cycles, prepare aliquots and freeze. 6. Allow reagents to warm to room temperature, and spin down vials briefly to ensure contents are not lost in caps. 7. Store Part 2 refrigerated at 2-8°C.



## Fluoro Phosphate Detection Kit

### Kit Components

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1. 25X Substrate, Storage: -20°C 2. Detection Reagent, Storage: -20°C 3. Enzyme A, Storage: -20°C 4. Enzyme B, Storage: -20°C 5. Phosphate standard, Storage: 2-8°C 6. Horseradish Peroxidase enzyme, Storage: 2-8°C 7. 1X Reaction Buffer, Storage: 2-8°C 8. Sample diluent, Storage: 2-8°C 9. 1 Black clear-bottom 96-well plate for fluorescent plate reader

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### Features & Benefits

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1. Quantitation of phosphate anion in blood, plasma and serum samples. 2. Sensitive-can detect upto 200nM phosphate 3. Easy to use-Fluorescence (ex/em 535/585nm or Absorbance readout 570nm)

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