

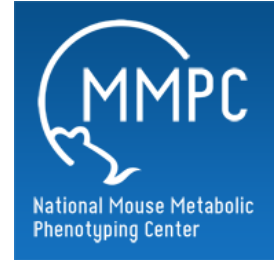


May 16, 2019

Yale - Alkaline Phosphatase

DOI

dx.doi.org/10.17504/protocols.io.yz7fx9n



Gary Cline¹, John Stack¹

¹Yale University

Mouse Metabolic Phenotyping Centers
Tech. support email: info@mmpc.org



Lili Liang

Create & collaborate more with a free account

Edit and publish protocols, collaborate in communities, share insights through comments, and track progress with run records.

Create free account

OPEN  ACCESS



DOI: <https://dx.doi.org/10.17504/protocols.io.yz7fx9n>

External link: <https://mmpc.org/shared/document.aspx?id=208&docType=Protocol>

Protocol Citation: Gary Cline, John Stack 2019. Yale - Alkaline Phosphatase. **protocols.io**
<https://dx.doi.org/10.17504/protocols.io.yz7fx9n>

License: This is an open access protocol distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Protocol status: Working

We use this protocol and it's working

Created: March 11, 2019

Last Modified: May 16, 2019

Protocol Integer ID: 21279

Keywords: Alkaline Phosphatase activity, amount of alkaline phosphatase activity, alkaline phosphatase summary, alkaline phosphatase activity, alkaline phosphatase, phosphate, nitrophenyoxide ion, alp, nitrophenylphospate, hydrolysis

Abstract

Summary:

Procedure to measure the amount of Alkaline Phosphatase activity. Alkaline Phosphatase (ALP) activity is measured from the hydrolysis of 4-nitrophenylphospate to 4-nitrophenyoxide ion (monitored at 405 nm) and phosphate.

Materials

MATERIALS

⊗ Alkaline Phosphatase Reagent Prolabs(cliniqa) Catalog #R85120

⊗ Assayed Control Serum 1 Prolabs(cliniqa) Catalog #R83082

⊗ Assayed Control Serum 2 Prolabs(cliniqa) Catalog #R83083

Reagent Preparation:

Alkaline Phosphatase Reagent: Add the appropriate amount of water (6.5mL) to the reagent bottle. Invert to mix, allowing 15 minutes for the reagent to settle.

Assayed Control Serum 1: Add the appropriate amount of water (6.5mL) to the chemical control bottle. Invert to mix, allowing 15 minutes for the reagent to settle.

Assayed Control Serum 2: Add the appropriate amount of water (6.5mL) to the chemical control bottle. Invert to mix, allowing 15 minutes for the reagent to settle.

Troubleshooting

Before start

Analysis by automated system Cobas Mira Plus.

- 1 Calibrate Cobas for Alkaline Phosphatase Activity analysis by running two assayed control serum.
- 2 Sample handling as performed by the Cobas Mira Plus.
 - a) Pipette 3 μL of sample into a cuvette slot.
 - b) Add 150 μL of Alkaline Phosphatase Reagent.
 - c) Mixture is incubated at 37°C and spun for 10 minutes.
 - d) Absorbance is measured at 405 nm.