



*Kaiser Permanente Medical Center, San Francisco
Northern California Region*

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 Work Instruction		
Title: CHEM - Pyruvate Preatalytical		WI Number SFOWI-1248 Revision: 6
Department: Chemistry	<i>Approved Work Instruction</i>	Implementation Date: 07/01/2019
Area: 2425 Geary Blvd SFO Hospital Lab		
Type of Document: Work Instruction		Review Period - 365 Days

I. Purpose

Test for Pyruvic Acid requires special handling and pretreatment prior to sending to Quest or Kaiser Permanente Southern California Genetics Lab for testing. This procedure provides instructions for preparing such samples.

II. Procedure

A. Quest Laboratory (see Lablink Test Directory)

1. Collection Instructions

- Collect 4 ml random whole blood in an EDTA (lavender-top), sodium or lithium heparin (green-top), or fluoride oxalate (gray-top) tube on ice.
- Upon receipt in the laboratory, CLS to immediately mix with 4 mL ice cold 7-8% perchloric acid.

Caution - Perchloric acid is a strong oxidizer and corrosive. Use with adequate ventilation.

- Allow mixture to stand for 10 minutes, then spin for 10 minutes in a refrigerated centrifuge.
- Separate and submit 4.5 ml supernatant fluid for assay, refrigerated 2-8 degrees Celsius. **Minimum volume is 2 mL supernatant.**
- Indicate on the tube the amount of blood and the amount of perchloric acid used.

2. Send Out
 - Place prepared sample in the Send Out rack in the refrigerator.
 - Sample will be sent on cold packs to Quest Diagnostics.

Quest Diagnostics, Chantilly Nichols Institute
14225 Newbrook Dr.
Chantilly, VA 20151-2228

3. Specimen stability
 - Room temperature: unacceptable
 - Refrigerated: 30 days
 - Frozen: 90 days

B. Genetics Lab

1. By **special request** , Pyruvate may be performed by Metabolic Laboratory as a Misc Ref request.
2. Collect minimum 1 mL of blood in a **pre-chilled** grey top(Na-FI) tube and place the sample on ice.
3. Immediately upon receipt in the lab, mix 2 ml of blood with 2 mL of cold 8% perchloric acid. Invert a few times to ensure mixing.

Caution - Perchloric acid is a strong oxidizer and corrosive. Use with adequate ventilation and

4. Allow the mixture to stand for an additional 5 minutes in ice.
5. Spin for 10 minutes at 1500 g. Centrifuge will need to be adjusted to the required setting.
6. Separate the supernatant and freeze. Frozen sample will be sent to:

Genetic Testing Laboratory
Biochemical Genetics Section
4580 Electronics Place
Los Angeles, CA 90039

Phone# (818) 502-5566
Fax# (818) 502-5119

Tie Line 8-336-5566
Tie Line 8-336-5119

III. Notes

1. Perchloric acid is supplied by Quest. It may be stored at room temperature, but must be ice-cold when used. A few vials are stored in Micro Media Ref #2, and additional supplies are in Lab Assistant Phone Area.
2. Quest performs this test Monday, Wednesday and Friday. Report available in 2-5 days
3. Room temperature sample will be rejected.

IV. References

1. Quest Diagnostics via Kaiser Lablink (lablink.ca.kp.org): *Intranet* > *Departments* > *Clinical Laboratory* > *Lablink*. Type Pyruvate in search window.

2. Genetics Laboratory, Southern California Permanente Group.

Associated Documents:

External Documents

Associated Quality System Documents - None

Document Revision History:

Revision: 6	Date Created: 05/05/2015 Date of Last Revision: 05/17/2019	Last Approval Date: 05/17/2019
Document Author: Kevin W LUI/CA/KAIPERM		

Reason for Change:

Revision:	Sec/Para Changed	Change Made:	Date
1	N/A	Initial Issue of Document	5/6/2015
2	Approver	Change Approver to Eric Suba, MD	04/06/17
3	Approver	Change in Associate Pathologist	12/16/17
4.	Approver	Changed CLIA Director	4/3/2019
5.	Collection & Stability Info	Updated acceptability criteria with KP Lablink.	5/17/19

Notification List:

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May 17, 2019 02:44:04 PM PDT - Approved by: Vaiju Ruikar/CA/KAIPERM

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Document History Section