Test Definition: PEWE

Porphyrins Evaluation, Washed Erythrocytes

Reporting Title: Porphyrin Evaluation, RBC
Performing Location: Rochester

Specimen Requirements:

All porphyrin tests on erythrocytes can be performed on 1 draw tube.

Collection Container/Tube:
Preferred: Green top (sodium heparin)
Acceptable: Metal free, lavender top (EDTA) or green top (lithium heparin)
Submission Container/Tube: Plastic vial
Specimen Volume: Washed erythrocyte suspension
Collection Instructions:
1. Patient should abstain from alcohol for 24 hours.
2. Collect and process whole blood specimen as follows:
a. Immediately place specimen on wet ice.
b. Transfer entire specimen to a 12-mL graduated centrifuge tube.
c. Centrifuge specimen for 10 minutes at 2,000 rpm.
d. Record volume of packed cells and the total volume of the specimen.
e. Discard supernatant plasma.
f. Wash packed erythrocytes 2 times by resuspension of at least an equal amount of cold 0.9% saline, mix, and centrifuge for 5 minutes at 2,000 rpm, discarding supernatant after each washing.
g. Resuspend packed cells to the original total volume with 0.9% saline. Invert specimen gently to mix.
Additional Information:
1. Volume of packed cells and total volume of erythrocyte suspension (red cells + saline) are required and must be sent with specimen.
2. Include a list of medications the patient is currently taking.
Forms:
1. 1. New York Clients-Informed consent is required. Please document on the request form or electronic order that a copy is on file. An Informed Consent for Genetic Testing (Supply T576) is available in Special Instructions.
2. 2. If not ordering electronically, submit a Biochemical Genetics Request Form (Supply T439) with the specimen.

Specimen Type	Temperature	Time
Washed RBC	Frozen	14 days

Ask at Order Entry (AOE) Questions:

Test ID	Question ID	Description	Type	Reportable
PEWE	BG569	Total cell suspension	Plain Text	Yes
PEWE	BG570	Packed cell volume	Plain Text	Yes

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
31942	Total Porphyrins, RBC	Numeric	mcg/dL	2814-2
31943	Interpretation	Alphanumeric		59462-2
BG569	Total cell suspension	Alphanumeric		In Process
BG570	Packed cell volume	Alphanumeric		In Process

CPT Code: 1 × 84311

Reflex Tests:

Test ID	Reporting Name	CPT Units	CPT Code	Always Performed	Orderable Separately
PFR	Porphyrins, Fractionation	1	82492	No	No
PPFR	Protoporphyrins, Fractionation	1	84202	No	Yes (order PPFE)

Result Codes for Reflex Tests:

Test ID	Result ID	Reporting Name	Type	Unit	LOINC®
PFR	2340	Uroporphyrin	Numeric	mcg/dL	14180-4
PFR	2341	Heptacarboxyl Porphyrins	Numeric	mcg/dL	9446-6
PFR	2346	Hexacarboxyl Porphyrins	Numeric	mcg/dL	16963-1
PFR	2347	Pentacarboxyl Porphyrins	Numeric	mcg/dL	18250-1
PFR	2329	Coproporphyrin	Numeric	mcg/dL	18257-6
PFR	2328	Protoporphyrin	Numeric	mcg/dL	2896-9
PFR	29355	Interpretation	Alphanumeric		59462-2
PPFR	2327	Zinc-Complexed Protoporphyrin	Numeric	mcg/dL	33007-6
PPFR	2326	Free Protoporphyrin	Numeric	mcg/dL	2892-8
PPFR	28434	Interpretation	Alphanumeric		59462-2

Reference Values:

PORPHYRINS, TOTAL, RBC
<80 mcg/dL packed cells

FREE PROTOPORPHYRIN
<20 mcg/dL packed cells

ZINC-COMPLEXED PROTOPORPHYRIN
<60 mcg/dL packed cells

UROPORPHYRIN
< or =2 mcg/dL packed cells

HEPTACARBOXYLPORPHYRIN
< or =1 mcg/dL packed cells

HEXACARBOXYLPORPHYRIN
< or =1 mcg/dL packed cells

PENTACARBOXYLPORPHYRIN
< or =1 mcg/dL packed cells

COPROPORPHYRIN
< or =2 mcg/dL packed cells

PROTOPORPHYRIN
<80 mcg/dL packed cells