

Notification Date: April 14, 2021 Effective Date: April 22, 2021

Plasmalogens, Blood

Test ID: PGRBC

Useful for:

Diagnosing patients with possible peroxisomal disorders, such as peroxisomal biogenesis disorders (Zellweger syndrome spectrum) and rhizomelic chondrodysplasia punctata (RCDP), including fatty acyl-CoA reductase 1 (FAR1) deficiency

Evaluating patients with abnormal newborn screen results for X-linked adrenoleukodystrophy who appear to have a different type of peroxisomal disorder, such as a Zellweger syndrome spectrum disorder.

An aid in the assessment of peroxisomal function

Genetics Information:

This test measures plasmalogens and plasmalogen to fatty acid ratios for the purpose of diagnosis of peroxisomal biogenesis disorders (Zellweger syndrome spectrum) and rhizomelic chondrodysplasia punctata (RCDP), including fatty acyl-CoA reductase 1 (FAR1) deficiency.

Methods:

Gas Chromatography-Mass Spectrometry (GC-MS)

Reference Values:

HEXADECANAL-DIMETHYLACETAL, C16:0 DMA: > or =6.00 mcg/mL

OCTADECANAL-DIMETHYLACETAL, C18:0 DMA: > or =9.00 mcg/mL

9Z-OCTADECENAL-DIME ACETAL C18:1DMA: > or =2.00 mcg/mL

C16:0 DMA/C16:0:

> or = 0.018

C18:0 DMA/C18:0:

> or = 0.040

Specimen Requirements:

Patient Preparation: Collect either prior to or 6 weeks after a blood transfusion

Preferred: Lavender top (EDTA)

Acceptable: Green top (sodium or lithium heparin), yellow top (ACD solution A or ACD solution B)

Specimen Volume: 2 mL

Collection Instructions: Send specimen in original tube.

Minimum Volume: 0.5 mL

Specimen Stability Information:

Specimen Type	Temperature	Time
Whole Blood	Refrigerate (preferred)	14 days
	Ambient	14 days

Cautions:

The results of testing performed in erythrocytes are invalid following a transfusion; therefore, collect specimen either prior to or 6 weeks after blood transfusion.

CPT Code:

82542

Day(s) Setup: Wednesday; 8 a.m. **Analytic Time:** 3 days

Questions

Contact Melissa Tricker-Klar, Laboratory Technologist Resource Coordinator at 800-533-1710.