MAYO CLINIC LABORATORIES

Test Definition: FBAC

Bile Acids, Urine

Overview

Method Name
Fast Atom Bombardment-Mass Spectrometry (FAB-MS)

NY State Available
Yes

Specimen

Specimen Type
Urine

Specimen Required
Collection Container: Plastic urine container
Specimen Volume: 5-25 mL
Collection Instructions:

1. Collect 5-25 mL random urine without preservative.
2. Ship frozen in a plastic container.

NOTE: Submit with specimen:
1. Clinical history/Preliminary diagnosis

-Because URSO can mask detection of bile acid synthetic defects it is preferable for patients to be off Urso or Actigall for 5 days before sample collection.

-If possible, send Urine & Serum (ZW166 - Bile Acids Serum, referral lab code 9001004). Urine is analyzed for all patients - if Urine shows evidence of a metabolic abnormality, Serum will be tested. Urine and serum must be ordered separately as they are 2 separate tests with separate charges.

Specimen Minimum Volume
1 mL

Reject Due To

Hemolysis	NA
Lipemia	NA
Icterus	NA
Other	Collection in or on diaper or cotton balls

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Urine	Frozen (preferred)		
	Ambient	48 hours	
	Refrigerated	48 hours	

Clinical & Interpretive

Clinical Information

Diagnostic testing in pediatric and adult patients presenting with conditions of cholestatic liver disease, neurological disease, or fat-soluble vitamin malabsorption of unknown etiology. Urine FAB-MS analysis provides a rapid and cost-effective means of diagnosing the most common of the genetic defects in the metabolism of cholesterol to the primary bile acids. Mass spectrometry testing may be used to monitor the biochemical response to primary bile acid therapy and to help in decisions on dose adjustments, where compliance should lead to a reduction in levels of atypical bile acids.

Performance

Method Description

Application of liquid secondary ionization mass spectrometry using fast atom bombardment (FAB-MS) ionization to detect the negative ions associated with the presence of increased concentrations of atypical bile acids in urine resulting from the loss of activity of one of the key enzymes that catalyze the production of normal primary bile acids by the liver. Each enzyme defect yields a distinct and specific mass spectrum that permits the diagnosis of the genetic defect.

PDF Report

Referral

Day(s) Performed

Friday

Report Available

7 to 30 days

Performing Laboratory Location

Cincinnati Childrens Hosp Med CTR Core Laboratories

Fees & Codes

Fees

- Authorized users can sign in to Test Prices for detailed fee information.
- Clients without access to Test Prices can contact Customer Service 24 hours a day, seven days a week.

- Prospective clients should contact their account representative. For assistance, contact Customer Service.

Test Classification

This test was developed and its performance characteristics were determined and validated by the Clinical Mass Spectrometry Laboratory at Cincinnati Childrens Hospital Medical Center. It has not been cleared or approved by the U. S. Food and Drug Administration. This laboratory is certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA 88) as qualified to perform high-complexity laboratory testing.

CPT Code Information

83789

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
FBAC	Bile Acids, Urine	49254-6

Result ID	Test Result Name	Result LOINC® Value
FBAC	Bile Acids, Urine	49254-6