

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 | | |

Clinical and 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) and Time(s) Test Performed

Weekly Friday

Analytic Time

7-10 days

Maximum Laboratory Time

30 days

Performing Laboratory Location

Child Hospital Medical Center Division of Clinical Mass Spectrometry

Fees and 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 Regional Manager. 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 |