

Overview**Useful For**

Evaluation of Rh disease, ie, hemolytic disease of the fetus

Monitoring disease progression to assess need for fetal transfusion

Special Instructions

- [Interpretation of Amniotic Fluid Bilirubin Results \(Delta OD 450\)](#)

Method Name

SpectrophotometricScan

NY State Available

Yes

Specimen**Specimen Type**

Amniotic Fld

Shipping Instructions

Ship specimen in amber vial to protect from light.

Necessary Information

Gestational age at time of amniocentesis is required.

Specimen Required

Supplies: Amber Frosted Tube, 5 mL (T192)

Collection Container/Tube: Amniotic fluid container

Submission Container/Tube: Opaque, amber vial (T192)

Specimen Volume: 3.5 mL

Collection Instructions:

1. Centrifuge, separate supernatant, and send both supernatant and sediment.
2. Label specimens as sediment and supernatant.

Specimen Minimum Volume

1.7 mL

Reject Due To

Gross icterus	OK
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Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Amniotic Fld	Frozen	70 days	LIGHT PROTECTED

Clinical and Interpretive

Clinical Information

The presence of bilirubin in amniotic fluid, which results in a yellow color, is an indicator of fetal erythroblastosis. Visual inspection of amniotic fluid is unreliable because bilirubin is not the only cause of an excessive yellow color; therefore, the presence of bilirubin must be confirmed with spectrophotometric methods. Meconium may contribute a green color (biliverdin) that can obscure the color of bilirubin and hemoglobin.

Reference Values

Interpretation of fetal risk is dependent upon gestational age.

Refer to either the Queenan Curve (gestational age <27 weeks) or the Liley Chart (gestational age >27 weeks) listed under [Interpretation of Amniotic Fluid Bilirubin Results \(Delta OD 450\)](#) in Special Instructions.

Interpretation

The reference range for bilirubin in amniotic fluid is related to the gestational age of the fetus. Refer to either the Queenan Curve (gestational age <27 weeks) or the Liley Chart (gestational age >27 weeks) listed under [Interpretation of Amniotic Fluid Bilirubin Results \(Delta OD 450\)](#) in Special Instructions.

Cautions

Bilirubin is photosensitive. Collect the specimen in an opaque amber container and/or wrap in aluminum foil.

Clinical Reference

1. Scott F, Chan FY: Assessment of the clinical usefulness of the 'Queenan' chart versus the 'Liley' chart in predicting severity of rhesus iso-immunization. *Prenat Diagn* 1998;18:1143-1148
2. Liley AW: Liquor amnii analysis in the management of the pregnancy complicated by rhesus sensitization. *Am J Obstet Gynecol* 1961;82:1359-1370

Performance

Method Description

Scanning spectrophotometry (SP). (Ashwood ER: Clinical chemistry of pregnancy. In Tietz Textbook of Clinical Chemistry. Fourth edition. Edited by CA Burtis, ER Ashwood. Philadelphia, WB Saunders Company, 2006, pp 2187-2188; Bailey DN, Briggs JR: Studies of the extraction of bilirubin from human amniotic fluid. *Am J Clin Pathol* 2006;125:771-773; Halldorsdottir AM, Grenache DG, Snyder J et al: Comparison of various methods for amniotic fluid deltaOD450 bilirubin measurement. *Clin Chim Acta* 2008;389:160-163)

PDF Report

No

Day(s) and Time(s) Test Performed

Monday through Saturday; Continuously

Analytic Time

Same day

Maximum Laboratory Time

1 day

Specimen Retention Time

3 weeks

Performing Laboratory Location

Rochester

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 determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the U.S. Food and Drug Administration.

CPT Code Information

82247

LOINC® Information

Test ID	Test Order Name	Order LOINC Value
AFBIL	Bilirubin, AF	27198-1

Result ID	Test Result Name	Result LOINC Value
AMBL	Amniotic Fluid	27198-1
AFCMT	Other Information	48767-8
GSTN	Gestation	18185-9