Test Definition: CULAF

Culture for Genetic Testing, Amniotic Fluid

Overview

Useful For
Producing amniocyte cultures that can be used for genetic analysis

Testing Algorithm
This processing test is for culturing amniocytes for prenatal genetic testing.

Once confluent flasks are established, the amniocyte cultures are sent to other laboratories, either within Mayo Clinic or to external sites, based on the specific testing requested.

Method Name
Cell Culture

NY State Available
Yes

Specimen

Specimen Type
Amniotic Fld

Shipping Instructions
Advise Express Mail or equivalent if not on courier service.

Necessary Information
Provide a reason for testing with each specimen. The laboratory will not reject testing if this information is not provided, but appropriate testing and interpretation may be compromised or delayed.

The additional tests desired **must be indicated** on the request form that accompanies the specimen.

Specimen Required
Optimal timing for specimen collection is during 14 to 18 weeks of gestation, but specimens collected at other weeks of gestation are also accepted.

Container/Tube: Amniotic fluid container
Specimen Volume: 5 to 10 mL
Collection Instructions:
1. Discard the first 2 mL of amniotic fluid. If the culture will be performed in conjunction with other cytogenetic testing, such as CHRAF / Chromosome Analysis, Amniotic Fluid or CMAP / Chromosomal Microarray, Prenatal, Amniotic Fluid/Chorionic Villus Sampling, a total of 25 to 30 mL will be needed.
4. Unavoidably, about 1% to 2% of mailed-in specimens are not viable.

5. Bloody specimens are undesirable.

Specimen Minimum Volume
5 mL

Reject Due To
All specimens will be evaluated at Mayo Clinic Laboratories for test suitability.

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Amniotic Fld	Refrigerated (preferred)		
	Ambient		

Clinical & Interpretive

Clinical Information
Fetal cells obtained by amniocentesis (amniocytes) are used for a wide range of laboratory tests. Prior to testing, the cells may need to be cultured to obtain adequate numbers of amniocytes.

Reference Values
Not applicable

Cautions
Interfering factors:
-Inadequate amount of specimen may not permit adequate analysis
-Exposure of the specimen to temperature extremes (freezing or >30 degrees C) may destroy cells and interfere with attempts to culture cells
-Improper packaging may result in broken, leaky, and contaminated specimens during transport
-Transport time should not exceed 2 days
-Contamination by maternal cells may interfere with attempts to culture cells and may cause interpretive problems

Clinical Reference
Arsham MS, Barch MJ, Lawce HJ, eds. The AGT Cytogenetics Laboratory Manual. 4th ed. Wiley-Blackwell; 2017

Performance

Method Description
The specimen is split into 8 to 10 separate culture dishes. The cells are grown on coverslips in culture media for 4 to 10 days. The cultures are trypsinized into 2 to 3 T25 tissue culture flasks or 1 to 2 T75 tissue culture flasks.(Arsham MS, Barch MJ, Lawce HJ, eds. The AGT Cytogenetics Laboratory Manual. 4th ed. Wiley-Blackwell; 2017:175-178)

PDF Report

No

Day(s) Performed
Monday through Friday

Report Available
23 to 24 days

Specimen Retention Time
Cell cultures: 6 months; Any remaining supernatant or whole fluid aliquots: 14 days after results reported.

Performing Laboratory Location
Mayo Clinic Laboratories - Rochester Main Campus

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
Not Applicable

CPT Code Information
88235
88240

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
CULAF	Amniotic Fluid Culture/Genetic Test	103593-0

Result ID	Test Result Name	Result LOINC® Value
52304	Result Summary	50397-9
52306	Interpretation	69965-2
52305	Result	82939-0
CG767	Reason for Referral	42349-1
52307	Specimen	31208-2
52308	Source	31208-2
52309	Method	85069-3
54641	Additional Information	48767-8
52310	Released By	18771-6