
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 referral 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

Supplies: Refrigerate/Ambient Shipping Box, 5 lb (T329)

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.

2. Place the tubes in a Styrofoam container.

3. Fill remaining space with packing material.
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 and 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

The AGT Cytogenetics Laboratory Manual Fourth edition. Edited by MS Arsham, MJ Barch, HJ Lawce. John Wiley and Sons Inc, Hoboken, NJ, 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. (In The AGT Cytogenetics Laboratory Manual Fourth edition. Edited by MS Arsham, MJ Barch, HJ Lawce. John Wiley and Sons Inc 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

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

Not Applicable

CPT Code Information

88235

88240

LOINC® Information

| Test ID | Test Order Name | Order LOINC Value |
|---------|-------------------------------------|-------------------|
| CULAF | Amniotic Fluid Culture/Genetic Test | In Process |

| 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 |

| Result ID | Test Result Name | Result LOINC Value |
|-----------|------------------------|--------------------|
| 52307 | Specimen | 31208-2 |
| 52308 | Source | 31208-2 |
| 52309 | Method | 49549-9 |
| 54641 | Additional Information | 48767-8 |
| 52310 | Released By | 18771-6 |