Test Definition: FIBR

Fibroblast Culture

Overview

Useful For

Obtaining cultured cells for specialized testing including enzymatic and molecular genetic

Additional Tests

Test ID	Reporting Name	Available Separately	Always Performed
CRYOB	Cryopreserve for Biochem Studies	No	Yes

Testing Algorithm

This processing test is for culturing skin fibroblasts or other biopsies for biochemical or molecular genetic studies. No analysis or interpretation of results is performed.

When this test is ordered, cryopreservation will always be performed at an additional charge. However, for multiple assays on a patient utilizing the ordered fibroblast culture, only one culture is required regardless of the number of assays ordered.

Once confluent flasks are established, the cultures are sent to other laboratories, either within Mayo Clinic Laboratories or to external sites, based on the specific testing requested. To avoid delays, indicate testing to be performed and provide external lab paperwork for send out testing.

If viable cells are not obtained within 30 days, client will be notified.

Mycoplasma screening will be performed on all successfully grown fibroblast cultures. If *Mycoplasma* is detected, all pending fibroblast clinical testing will be cancelled, and the samples will be discarded.

Special Instructions

- Biochemical Genetics Patient Information

Method Name

FIBR: Cultivated from Biopsy as Monolayer

CRYOB: Fibroblast Subculture followed by Cryopreservation and Storage

NY State Available

Yes

Specimen

Specimen Type

Tissue

Ordering Guidance

This test is most useful for skin biopsy specimens. The specimen is cryopreserved for a minimum of 3 years.

This test is **not appropriate for** products of conception (POC) or chorionic villus sampling (CVS) specimens.If this test is ordered for either a POC or CVS specimen, the test will be canceled and CULFB / Fibroblast Culture for Genetic Testing, Tissue will be performed as the appropriate test.

Necessary Information

1.Include patient clinical history with request. This information will be used for any testing performed on the cultured cells.

2. Indicate the tests to be performed on the fibroblast culture cells. **If send out testing is requested, the external lab paperwork must be submitted**.

Specimen Required

Submit only 1 of the following specimens:

Specimen Type: Cultured fibroblasts

Container/Tube: T-75 or T-25 flask

Specimen Volume: 1 Full T-75 flask or 2 full T-25 flasks

Specimen Stability Information: Ambient/Refrigerated

Specimen Type: Skin biopsy

Supplies: Fibroblast Biopsy Transport Media (T115)

Container/Tube: Sterile container with any standard cell culture media (eg, minimal essential media, RPMI 1640). The solution should be supplemented with 1% penicillin and streptomycin. Tubes of culture media can be supplied upon request (Eagle's minimum essential medium with 1% penicillin and streptomycin).

Specimen Volume: 4-mm punch

Specimen Stability Information: Refrigerated/Ambient

Forms

Biochemical Genetics Patient Information (T602) in Special Instructions.

Reject Due To

Tissue in formalin or fixative preservative	Reject

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Tissue	Varies		

Clinical and Interpretive

Clinical Information

Cultures of skin fibroblasts are useful for specialized tests requiring skin cells. These cells can be cultured and tested at Mayo Clinic Laboratories or sent to external laboratories performing these specialized tests. In addition, cells are frozen for a minimum of 3 years for potential future studies on cultured cells or for molecular genetic testing.

Reference Values

Not applicable

Cautions

Potential interfering factors:

-Lack of viable cells

-Bacterial contamination

-Failure to transport tissue in an appropriate media

-Excessive transport time

-Exposure of the specimen to temperature extremes (freezing or >30 degrees C)

-Improper packaging may result in broken or leaky specimen containers or contamination of specimens during transport

Performance

Method Description

Submitted biopsy specimens are minced, placed in a culture flask with additional culture media supplemented with fetal calf serum, and incubated. When the fibroblasts have grown from the pieces of tissue (2-4 weeks), the cultures are expanded and then cryopreserved (CRYOB / Cryopreservation for Biochemical Studies). If specific molecular or biochemical testing is concurrently ordered, cells will be harvested or prepared for indicated testing. Submitted cultured cells are examined for cell integrity and fed fresh media. Once grown to confluency, the cultures are expanded and then, if indicated, cryopreserved.(Unpublished Mayo method)

PDF Report

No

Day(s) Performed

Varies

Report Available

40 to 45 days

Specimen Retention Time

3 years minimum-Check with lab for availability

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

88233-Fibroblast culture

88240-Cryopreservation for biochemical studies

LOINC® Information

Test ID	Test Order Name	Order LOINC Value
FIBR	Fibroblast Culture	96300-9

Result ID	Test Result Name	Result LOINC Value
8482	Fibroblast Culture	96300-9