FISH, POC Aneuploid

Cyto genetic Diagnosis

NORMAL MALE BY FISH

Cyto genetic Interpretation

Comment:

Cells Counted

100

Cells Analyzed

100

Fluorescence in situ hybridization (FISH) on the tissue specimen revealed two hybridization signals for chromosomes 13, 16, 18, 21, 22 and a single hybridization signal each for the X and Y chromosomes in 100 interphase cells analyzed. These results are consistent with a male disomic for chromosomes 13, 16, 18, 21 and 22. Other chromosomes are not targeted by this limited panel.

All paraffin-embedded tissues referred for FISH testing are reviewed by a pathologist at the 1912 Center for Molecular Biology and Pathology 1 location.

This test was developed and its performance characteristics determined by Laboratory Corporation of America Holdings (LabCorp). It has not been cleared or approved by the U.S. Food and Drug Administration.

A new high resolution whole genome SNP microarray protocol (test #510110) is now available from FFPE samples or fresh tissue.
Array Advantages

- Fetal tissue can often be overgrown in culture by more viable maternal tissue that may be present in the biopsy.
- POC tissue may also fail to grow due to low cell viability associated with contamination or transport delay.
- The directly isolated DNA used for microarray analysis is largely unaffected by relative viability, providing diagnostic dosage results when fetal DNA is greater than 10% of the biopsy.
- Mixes of normal female fetal and maternal cells can also be detected (based on unique allele ratios), reducing the need for follow-up maternal cell contamination studies.
- In addition, cytogenetically normal complete moles can easily be detected by the SNP genotyping array.
- The resolution of the array is 300x greater than standard cytogenetics and provides whole genome analysis compare to select target FISH in FFPE.

<table>
<thead>
<tr>
<th>Specimen Type</th>
<th>Comment:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLOOD</td>
<td>01</td>
</tr>
</tbody>
</table>

Director Review:  
James H. Tepperberg, PhD, FACMG

©2004–16 Laboratory Corporation of America ® Holdings  
All Rights Reserved  
DOC1 Ver: 1.49
FISH RESULT: NORMAL MALE BY FISH

INTERPRETATION:

nuc
ish Xcen(DXZ1x1), Ycen(DYZ3x1), 13q14(RB1x2), 16q11.2
(D16Z3x2), 18cen(D18Z1x2), 21q22.13q22.2
(D21S259,D21S341,D21S342)x2, 22q12(EWSR1x2)

Fluorescence in situ hybridization (FISH) on the tissue specimen revealed two hybridization signals for chromosomes 13, 16, 18, 21, 22 and a single hybridization signal each for the X and Y chromosomes in 100 interphase cells analyzed. These results are consistent with a male disomic for chromosomes 13, 16, 18, 21 and 22. Other chromosomes are not targeted by this limited panel.

All paraffin-embedded tissues referred for FISH testing are reviewed by a pathologist at the 1912 Center for Molecular Biology and Pathology I location.

This test was developed and its performance characteristics determined by Laboratory Corporation of America Holdings (LabCorp). It has not been cleared or approved by the U.S. Food and Drug Administration.

A new high resolution whole genome SNP microarray protocol (test #510110) is now available from FFPE samples or fresh tissue.

Array Advantages
- Fetal tissue can often be overgrown in culture by more viable maternal tissue that may be present in the biopsy.
- POC tissue may also fail to grow due to low cell viability associated with contamination or transport delay.
- The directly isolated DNA used for microarray analysis is largely unaffected by relative viability, providing diagnostic dosage results when fetal DNA is greater than 10% of the biopsy.
- Mixes of normal female fetal and maternal cells can also be detected (based on unique allele ratios), reducing the need for follow-up maternal cell contamination studies.
- In addition, cytogenetically normal complete moles can easily be detected by the SNP genotyping array.
- The resolution of the array is 300x greater than standard cytogenetics and provides whole genome analysis compare to select target FISH in FFPE.
LCLS Specimen Number: 259-225-9017-0
Patient Name: SAMPLE REPORT, 510963
Date of Birth: 06/12/1985
Gender: F
Patient ID: 
Lab Number: YU16-73248 F

Account Number: 90000999
Ordering Physician:
Specimen Type: BLOOD
Client Reference:
Date Collected: 09/15/2016
Date Received: 09/15/2016

James H. Tepperberg, PhD, FACMG
Board Certified Cytogeneticist

Arundhati Chatterjee, MD
Medical Director
Peter Papenhausen, PhD
National Director of Cytogenetics

Technical component performed by Laboratory Corporation of America Holdings,
1904 TW Alexander Drive, RTP, NC, 27709-0153, (800) 345-4363
Professional Component performed by LabCorp CLIA 34D1008914, 1904 TW Alexander Dr, Research Triangle Park, NC 27709. Medical Director, Arundhati Chatterjee, MD. Integrated Genetics is a brand used by Esoterix Genetic Laboratories, LLC, a wholly-owned subsidiary of Laboratory Corporation of America Holdings.

This document contains private and confidential health information protected by state and federal law.
**FISH, POC Aneuploid**

<table>
<thead>
<tr>
<th>TESTS Ordered</th>
<th>RESULT</th>
<th>FLAG</th>
<th>UNITS</th>
<th>REFERENCE INTERVAL</th>
<th>LAB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cells Counted</td>
<td>100</td>
<td>01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cells Analyzed</td>
<td>100</td>
<td>01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cytogenetic Diagnosis</td>
<td>Comment:</td>
<td>01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FEMALE WITH TRISOMY 13 BY FISH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cytogenetic Interpretation</td>
<td>Comment:</td>
<td>01</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Fluorescence in situ hybridization (FISH) analysis on the tissue specimen submitted, using an unique sequence DNA probe (Vysis, Inc) for chromosome 13, revealed three hybridization signals. Normal disomic hybridization signals for chromosomes 16, 18, 21, 22 and X chromosome were observed. No Y chromosome hybridization signal was observed. These results are consistent with a female with trisomy 13.

FISH results should be interpreted within the context of a full cytogenetics analysis and the patient's clinical and family history.

This test was developed and its performance characteristics determined by Laboratory Corporation of America Holdings (LabCorp). It has not been cleared or approved by the U.S.Food and Drug Administration. The FDA has determined that such clearance or approval is not necessary. This test is used for clinical purposes. It should not be regarded as investigational or for research.
<table>
<thead>
<tr>
<th>TESTS</th>
<th>RESULT</th>
<th>FLAG</th>
<th>UNITS</th>
<th>REFERENCE INTERVAL</th>
<th>LAB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specimen Type</td>
<td>Comment:</td>
<td>BLOOD</td>
<td></td>
<td></td>
<td>01</td>
</tr>
<tr>
<td>Director Review:</td>
<td>Comment:</td>
<td>James H. Teppergberg, PhD, FACMG</td>
<td></td>
<td></td>
<td>01</td>
</tr>
</tbody>
</table>

For inquiries, the physician may contact Branch: 800−222−7566  Lab: 800−735−4087
**FISH RESULT:** FEMALE WITH TRISOMY 13 BY FISH

**INTERPRETATION:**

Fluorescence in situ hybridization (FISH) analysis on the tissue specimen submitted, using an unique sequence DNA probe (Vysis, Inc) for chromosome 13, revealed three hybridization signals. Normal disomic hybridization signals for chromosomes 16, 18, 21, 22 and X chromosome were observed. No Y chromosome hybridization signal was observed. These results are consistent with a female with trisomy 13.

FISH results should be interpreted within the context of a full cytogenetics analysis and the patient's clinical and family history.

This test was developed and its performance characteristics determined by Laboratory Corporation of America Holdings (LabCorp). It has not been cleared or approved by the U.S. Food and Drug Administration. The FDA has determined that such clearance or approval is not necessary. This test is used for clinical purposes. It should not be regarded as investigational or for research.