<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>Specimen</th>
<th>Room temperature</th>
<th>Refrigerated</th>
<th>Frozen</th>
<th>Method</th>
<th>Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q023</td>
<td>ChromoFix, Chromosome SNP Microarray, 75K, High resolution</td>
<td>4 ml (2 ml min) whole blood in 1 lavender top (EDTA) tube. Ship refrigerated: DO NOT FREEZE. Give clinical history on Genomic Microarray Request form.</td>
<td>NA</td>
<td>24 hrs.</td>
<td>NA</td>
<td>Affymetrix Cytoscan™ 750K microarray</td>
<td>Sample Daily by 4 pm, Report in 10 days</td>
</tr>
<tr>
<td>Q024</td>
<td>ChromoTouch Chromosomal SNP Microarray, Optima, Prenatal</td>
<td>Amniotic fluid: 15 ml (10 ml min) amniotic fluid in a sterile screw-capped container.</td>
<td>NA</td>
<td>24 hrs.</td>
<td>NA</td>
<td>Chromosome microarray using Affymetrix Optima Suite™</td>
<td>Sample Daily by 4 pm, Report in 10 days</td>
</tr>
<tr>
<td>Q025</td>
<td>ChromoTouch Chromosome SNP Microarray, Optima, Products of Conception</td>
<td>Submit 5 mg (2 mg min) cultured tissue in normal saline. Give clinical history on chromosomal microarray test request form.</td>
<td>NA</td>
<td>24 hrs.</td>
<td>NA</td>
<td>Chromosome microarray using Affymetrix Optima Suite™</td>
<td>Sample Daily by 4 pm, Report in 10 days</td>
</tr>
</tbody>
</table>

**References**

CHROMOTOUCH® SNP MICROARRAY PRENATAL

The ChromoTouch SNP microarray utilizes 315,608 markers to achieve whole genome coverage at a 75 kilobase (kb) spacing. It additionally covers more than 400 targeted regions, including known recurrent microdeletion/microduplication syndromes, centromere and telomere regions and disease-causing genes.

Indication for ordering test

Common indications for prenatal diagnosis include:
- Advanced maternal age
- Abnormal maternal serum screen
- Abnormal ultrasound
- Family history of a genetic imbalance
- Parental concern

Indications specific to the need for further testing by microarray:
- Previous abnormal fetal karyotype showing an imbalance (excluding aneuploidies)
  - For unbalanced rearrangements, Microarray can be used to size the deletion or duplication and identify the genes involved
- Previous abnormal fetal karyotype showing an apparently balanced rearrangement
  - For apparently balanced rearrangements, Microarray can be used to test for cryptic deletions/duplications at the breakpoints

Affymetrix Microarrays for enhanced detection of chromosomal abnormalities

Choosing ChromoTouch SNP Microarray for Prenatal
- Genetic imbalances such as chromosomal deletions and duplications have long been known to be the leading cause of intellectual disability, birth defects and developmental disorders
- Traditional methods for prenatal testing consist of G-banded chromosome analysis, which yields low resolution structural analysis of the chromosome
- Unlike the traditional analysis, ChromoTouch array allows for objective high-definition copy number analysis using the most current methods and software

AMERICAN COLLEGE OF OBSTETRICIANS AND GYNECOLOGISTS (ACOG) RECOMMENDATION 2013

The American College of Obstetricians and Gynecologists (ACOG) issued a committee opinion on the use of chromosomal microarray analysis in prenatal diagnosis, which provided the following practice recommendations to replace those set in 2009:2,3
- Chromosomal Microarray Analysis (CMA) is recommended for any patient, undergoing an invasive diagnostic prenatal procedure because of the ultrasound indication of one or more major structural anomalies in the fetus. CMA replaces the need for fetal karyotype
- CMA or Karyotype can be offered in those patients, undergoing invasive diagnostic prenatal testing if no structural fetal abnormality is noted on ultrasound regardless of maternal age