Products of Conception (POC)/
Tissue Chromosome SNP Microarray

Fetal losses may be attributed to physical problems or a number of other causes, including immunological or genetic causes. Genetic issues are largely assessed either through the cytogenetic analysis of the products of conception or the cytogenetic analysis of blood from the couple.

LabCorp is pleased to offer a Products of Conception (POC)/ Tissue assay using a Chromosome SNP Microarray that:

- is a whole genome SNP-based copy number microarray analysis targeting 1.8 million copy number and allele-specific genome sites with an approximate 97% success rate.[1]
- detects copy number changes with higher resolution (10-100 times greater) than can be detected by routine tissue G-banded chromosome analysis.[1]
- assists in identification of molar pregnancy.
- provides detection of homozygosity associated with uniparental disomy and relative recessive allele risk.
- is not confounded by maternal-fetal tissue mixes, longer duration of tissue storage/transport, and bacterial contamination.

LabCorp is a scientific leader and early developer of this technology.

Alternate microarray technologies such as comparative genomic hybridization (CGH) do not provide the comprehensive SNP genotyping advantages for POC testing provided by the LabCorp Chromosome SNP Microarray.

Reference

1. LabCorp. Internal data on file.

Products of Conception (POC)/Tissue Chromosome SNP Microarray 510110

CPT 83891; 83892(x3); 83894(x2); 83898(x7); 88271(x99); 88291

Related Information Fluorescence in situ Hybridization (FISH), Microdeletion Syndromes

Special Instructions Please provide relevant clinical history.

Specimen Nonfixed tissue or products of conception (POC)/ placental villus biopsy

Volume: > 2-4 mm^3 tissue

Container Sterile container containing sterile Ringer's lactate or Hanks' balanced salt solution or transport media provided by the cytogenetic laboratory. (Do **not** use isotonic saline as a transport medium or urine containers for shipping.)

Collection Aseptically obtain a small piece of fetal tissue that does not appear necrotic. If specimen is a POC, placental villi or membranes may be the only fetal-derived tissue available, and an effort should be made to submit these tissues rather than maternal decidua.

Storage Instructions Maintain specimen at room temperature.

Causes for Rejection Quantity not sufficient for analysis; necrotic tissue

Use This test will detect chromosomal imbalance that may be associated with fetal loss. Provides detection of uniparental disomy of any chromosome, the percentage of homozygosity, and the degree of parental relationship. Ideal for confirmation of complete or partial moles.

Limitations Results for this test are for research purposes only by the assay's manufacturer. The performance characteristics of this product have not been established. Results should not be used as a diagnostic procedure without confirmation of the diagnosis by another medically established diagnostic product or procedure. **Note:** This assay will not detect balanced rearrangements, low level mosaicism (< 10%), or tetraploidy.

Methodology Whole genome SNP-based copy number microarray analysis targeting 1.8 million copy number and allele-specific genome sites

Reference

Coppinger J, Alliman S, Lamb AN, Torchia BS, Bejjani BA, Shaffer LG. Whole-genome microarray analysis in prenatal specimens identifies clinically significant chromosome alterations without increase in results of unclear significance compared to targeted microarray. *Prenat Diagn.* 2009 Dec; 29(12):1156-1166.

For more information,
please call LabCorp Genetic Services at 800-345-GENE.

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