Products of Conception Specimen Processing

WSLH | UW CYTOGENETICS & MOLECULAR GENETICS SERVICES LABORATORY

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To obtain Products of Conception/Tissue kits contact our laboratory.

Kits include: 1-6ml sterile vial with 5ml of F10 media (transport media), 1 biohazard bag, and 1 absorbent pad. Store kits at 4°C or freeze for up to one year. If requested, test requisition forms (Genetic Diagnosis #131) and UPS return label are available.

Fetal specimens: Healthy tissue is pale pink to red in color, indicating an active blood supply. Placenta that includes chorionic villi is usually mottled pink/red. Samples that are solid dark red are usually blood clots and may not contain fetal tissue. Tissue that is pale tan to brown should be avoided if possible as this indicates necrosis. A 0.3-0.5cm cubed section of each tissue type should be collected using aseptic procedures. Place the specimen in a sterile tissue vial containing transport media. If multiple tissues are sent, please place the placenta in one vial and the other tissue(s) in a separate vial to minimize contamination of the tissues.

If no fetal material, only maternal decidua, is identified in the specimen, the sample will be processed. Chromosome analysis of maternal tissue may identify a structural rearrangement present in the mother's cells; a balanced maternal karyotype may lead to an unbalanced fetal karyotype.

Skin biopsies: Skin should be cleaned using alcohol, do not use iodine or betadine as these will compromise the cell growth in culture. Do a 1-2mm punch biopsy that goes full depth through the epidermis into the sub-cutaneous fat. Place the specimen in a sterile tissue vial containing transport media.

Store and transport specimens at room temperature (may transport with coolant during hot weather, >85 degrees F). DO NOT FREEZE. The laboratory must receive specimens within 24 hours of collection. If the sample is collected on the weekend, refrigerate the sample until the next business day.

Laboratory regulations require the following minimum information to be provided on the requisition form for a specimen to be accepted for testing: Patient name or unique identifier; date and time of collection, patient date of birth and sex, specimen type/site of collection, test request(s), reason for referral, clinician name and UPIN/NPI, and address for reporting results. Please be certain that name/identifier on the form matches that on the specimen label.

Testing Available:

Chromosome Analysis

Test Code 830: G-banded chromosome analysis of cultured cells from products of conception or tissue biopsy. Includes culture of cells from specimen(s), examination of at least 20 metaphase cells, and preparation of two karyograms. Additional cells may be examined if indicated by initial results. Additional karyograms may be prepared if multiple cell lines are observed.

FISH (Fluorescent *in situ* Hybridization): Paraffin-embedded tissue on slides REQUIRED for this test

Test Code 875: FISH analysis of paraffin embedded placenta or fetal tissue to determine copy number of chromosomes 13, 16, 18, 21, 22, X and Y. Paraffin embedded tissue (FFPE): Seven 4-micron sections on immunohistochemistry slides, the middle section stained with H&E.

Chromosomal Microarray Analysis

Test Code 890: The American College of Obstetricians and Gynecologists recommends CMA in patients with a fetus with a structural abnormality detected by ultrasound and in cases of intrauterine fetal demise or stillbirth. This test can be ordered in combination with Chromosome Analysis as a tired or concurrent add-on. Please be sure to select the Chromosome Analysis test on the requisition form.