



Cytogenetics

Tissue Requirements for Pregnancy Products and Stillborns

Gestational age dictates the tissue type that is preferred for chromosome analysis. One or more tissues from the same specimen may be submitted to optimize the likelihood of a successful chromosome study. 20 to 30 mg of tissue is requested, although a smaller quantity is acceptable.

Early pregnancy loss

- Chorionic villi or fetal parts

The cytogenetics laboratory at MPLN will dissect villi from products of conception if preferred by the referring laboratory.

Spontaneous or induced abortion

- Placental tissue or fetal tissue
- If fetus is well-developed, internal organs typically grow well in culture – thymus and gonad are preferred

Intrauterine fetal demise (IUFD)

- Placental tissue and/or cord (in the case of a macerated fetus, placental tissue often remains viable for several days post fetal viability)
- Fetal organ (thymus or gonad preferred)
- Fetal muscle
- Fetal skin including subcutaneous layer

Stillbirth

- Fetal organ (thymus or gonad preferred)
- Fetal muscle
- Fetal skin including subcutaneous layer
- Placental tissue and/or cord

Shipping

- Do not freeze; do not expose to formalin
- Ship at ambient temperature for overnight delivery.
- Use sterile shipping media: RPMI, Hanks' solution, or sterile saline.
- Vacuum containers may be submitted; seal to prevent leakage; place in biohazard bag

FISH Testing

- FISH testing may be requested if a rapid result is warranted
- Paraffin-embedded tissue can be used for FISH studies if fresh tissue is not available

Samples for chromosome analysis and FISH are accepted Monday – Saturday at MPLN. If you have any questions about testing or sample requirements, please contact a client service specialist at 800-932-2943.