



UW Medicine  
Department of Laboratory Medicine

## *Maternal Cell Contamination*

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### **For Clinical Information:**

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*For additional ordering  
information and instructions,  
contact the Community  
Services office at (206) 598-  
6066 or (800) 713-5198*

Maternal cell contamination testing is routinely performed in conjunction with prenatal diagnosis for a genetic disorder. Testing of fetal amniocytes and chorionic villi, either directly or using cultured cells, has the potential for misdiagnosis if the fetal cells are contaminated with cells from the mother. Methods that analyze fetal DNA and RNA are very sensitive and it is important to ensure that the test result represents the DNA sequence of the fetus and not the mother. This test requires a sample from both the fetus and the mother. Five DNA segments on different human chromosomes are analyzed. DNA segments of the fetus are compared to those of the mother to determine if the fetal tissue is contaminated with maternal cells.

Contact the Genetics Laboratory (206) 598-6429 prior to sending a sample for prenatal or maternal cell contamination testing.

Specimen collection:	Fetal sample: cultured amniocytes in T25 or T75 flask or chorionic villi: tissue in sterile tube or culture media.
Mother's sample:	5 mL lavender top tube or 3 mcg purified DNA (with concentration given) in a screw cap tube.
Specimen transport:	Blood: Refrigerate entire tube up to 3 days. Amniocytes: (2) T25 or (1) T75 Flask (min. 1 T25 Flask), hold @ room temperature. (RT) Chorionic Villi (CV): at least 5 mg tissue hold at RT
Performed:	Test is performed concomitant with prenatal testing; both tests are expedited.
Reference Range:	No maternal cell contamination detected.
Test Order Code:	MCC
CPT Codes:	83900 x4, 83901 x2, 83909 x2, 83912
Note:	Amniocytes and / or CV transport & store at RT. DNA: Refrigerate entire tube up to 4 weeks.