



# Maternal Cell Contamination Test

## What is Maternal Cell Contamination (MCC)?

MCC analysis is an essential first step in prenatal genetic testing. It ensures that only fetal DNA is analysed by detecting and excluding any maternal DNA present in the sample. The presence of maternal cells/DNA in the fetal sample can compromise test accuracy and lead to misdiagnosis of the condition being evaluated.

## Why MCC Matters?

≥5-10% contamination can mask fetal variants

To rule out risk of false negative / false positive results

Impacts zygosity interpretation on platform

Critical for analytical and clinical validity

# Methodology

Maternal cell contamination is assessed using a PCR based approach that compares short tandem repeat (STR) markers between fetal and maternal samples.

This analysis utilizes a panel of highly polymorphic STR markers, including: D21S1435, D21S11, D21S1437, D13S634, D18S535, D18S386, D21S1446, D13S305, D18S978, D13S800, D18S390, D13S628, D21S1409, D13S252, D21S1442, and D18S819.

This comparative profiling enables accurate detection and exclusion of maternal DNA contamination, ensuring reliable interpretation of fetal genetic results.



Fetal:

CVS/ AF/ POC/ Any Fetal Sample

## Sample Requirements



Maternal:

Peripheral blood in EDTA

# Key Features



High sensitivity & specificity



Rapid Turn Around Time  
2-3 days



Multi step  
Verification



Compatible with all  
prenatal genetic platforms



Test done at NABL  
& CAP Accredited Lab



Detects contamination  
as low as 1-2%

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