

MOLECULAR CYTOGENETICS

Microarray Peripheral Blood Analysis

Royal Columbian Hospital phone (604) 520-4484
 330 E Columbia St. fax (604) 520-4149
 New Westminster, BC V3L 3W7

Patient name: _____
Last First

Date of Birth: _____ Sex: M F
DD/MM/YYYY

PHN: _____

Insurance: _____
Self pay, Out of Prov., WCB, RCMP, Veterans, and Refugee etc.

Ordering Physician: _____
Name MSP number

Medical Genetics # _____

Patient Address: _____ City: _____

Province/State: _____ Country: _____ Postal Code: _____ Phone: _____

Additional copies to: _____
Name & MSP number Name & MSP number Name & MSP number

1. **ALL Patient Demographics must be printed legibly and completed in full.**
 2. **Reason for analysis is essential, failure to provide this information may result in a delayed report.**
 3. **All Non Canadian Residents must sign a FHA waiver form. The signed and witnessed form must be attached to the requisition when specimen submitted.**
- [Molecular Cytogenetics Specimen Collection and Submission](#)

Indication: please check and provide details for all sections that apply Date Collected: _____
DD/MM/YYYY

Previous Chromosome analysis completed? No Yes - please provide details in space below.

Facility: _____ Accession Number: _____

Diagnosis: _____

- | | |
|---|--|
| <input type="checkbox"/> Intellectual disability / developmental delay / speech delay | <input type="checkbox"/> External and visceral malformations |
| <input type="checkbox"/> Behavioural abnormalities, including autistic spectrum disorders | <input type="checkbox"/> Other abnormalities, including physiological/metabolic disturbances |
| <input type="checkbox"/> Growth abnormalities | <input type="checkbox"/> Seizures |
| <input type="checkbox"/> Specific cranio-facial features / malformations | |

Test Consent: The information on the second page of this form has been reviewed with the individual/parents who consent to the test (s) requested.

Physician/Genetic Counselor Name: _____ Signature: _____

Submit this requisition and the sample to the Royal Columbian Hospital Molecular Cytogenetics Laboratory

LAB USE ONLY:

Sodium Heparin _____ mL EDTA _____ mL

Microarray Pre- Test Information

How is Cytogenetic Microarray testing performed?

Microarray analysis will be performed using DNA extracted from blood. The DNA is tested on a slide containing 2.6 million copy number markers across the whole genome. Testing will be performed in the Molecular Cytogenetic Laboratory at the Royal Columbian Hospital.

Why are 2 different tubes required?

The EDTA tube is used for the microarray analysis and the Sodium Heparin tube is used for confirmatory fluorescence in-situ hybridization (FISH) testing.

What is the aim of this test?

Microarray analysis is designed to detect gains or losses across the genome at a higher resolution than is possible by karyotyping. Such gains or losses may be the cause of the child's condition.

What are the limitations of this test?

Microarray testing will NOT detect the following abnormalities:

- Balanced chromosomal rearrangements such as inversions or translocations
- Regions not represented on the array
- Low level mosaicism
- Small genomic imbalances that are below resolution or current thresholds
- Gene mutations, detected using sequencing or other technologies

Cytogenetic microarray testing may detect normal variants or variants of unknown clinical significance. Thus, this test may not give a definitive answer as to the cause of the child's condition. Many conditions can not be ruled out on the basis of a normal test result.

What other information can be derived from this analysis?

Cytogenetic microarray analysis may reveal information beyond the intended purpose of diagnosis. This may include, but is not limited to, pre-symptomatic disease susceptibility, cancer predisposition or non-paternity.

This requisition and sample are to be submitted to the Royal Columbian Molecular Cytogenetics laboratory.