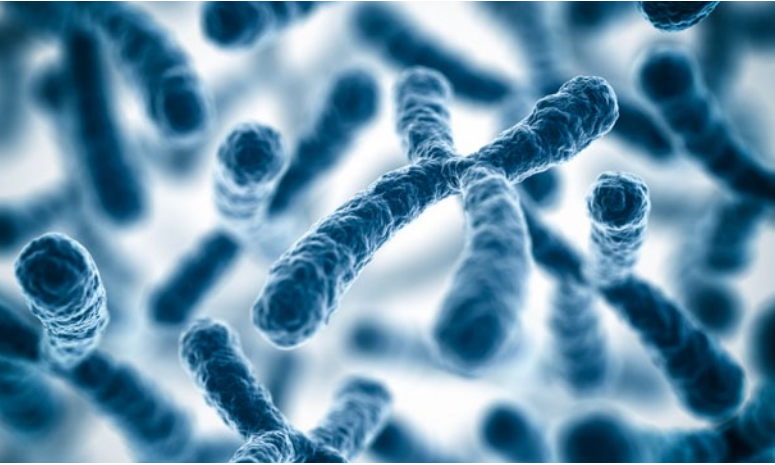


ARRAY BASED CYTOGENETICS



AGRF offers a wide range of services based on the utilisation of Illumina Human BeadChip arrays.

These services accommodate projects with a broad range of applications which include:

- Copy number variation (CNV)
- Loss of Heterozygosity (LOH)
- Chromosomal aberrations
- Linkage and linkage disequilibrium mapping
- Association studies
- SNP Genotyping
- Population genetic studies

These applications enable the discovery of more causative aberrations than conventional karyotype or FISH technologies.

AGRF offers the array based cytogenetics service to provide a high-resolution view of the entire genome, enabling the examination of genetic variation frequently associated with congenital disorders.

Illumina services

The AGRF offers a full service on all catalogue Illumina Human BeadChip arrays for Cytogenetics testing, including POC samples. AGRF utilises Illumina's HumanCytoSNP-12 Beadchip and CytoSNP-850k.

The Human CytoSNP-12 features:

- Median Spacing: 6.2 Kb (~0.008 cM)
- Sample Number: 12 per array
- Cytogenetic Markers: 299,671 (targeting known regions of cytogenetic importance)
- Focused target: 400 genes involved in developmental defects, delay and other structural changes.

The CytoSNP-850K features:

- Over 850,000 SNPs with 15x redundancy
- Sample Number: 8 per array
- Coverage for 3,262 genes of known cytogenetics relevance in both constitutional and cancer applications.

Higher density arrays are also available.



High-Throughput Processing

AGRF is able to offer high-throughput screening for cytogenetic testing. Using Tecan automation we are capable of processing up to 864 samples per week.

Our funding partners

AGRF is a not-for-profit organisation supported by the Commonwealth Government infrastructure schemes administered through Bioplatforms Australia.

These schemes include NCRIS, EIF, Super Science Initiative CRIS and NCRIS 2.