

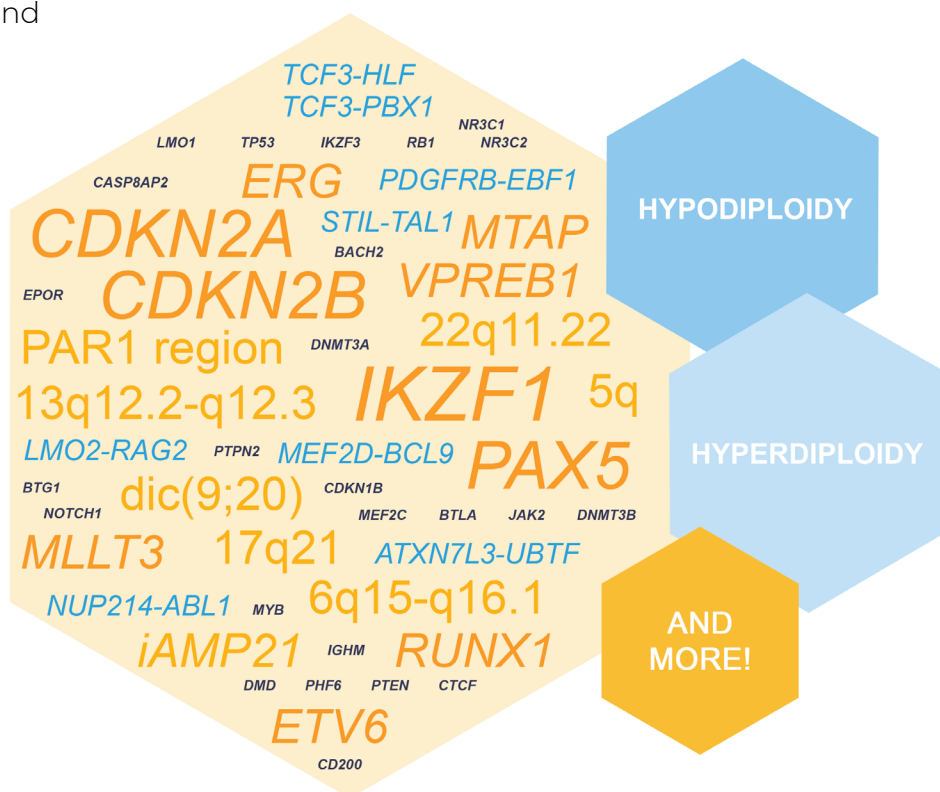
- ✓ **High resolution coverage** of 73 ALL-related genes and 8 regions
- ✓ **Gross copy number detection** with 250 probes across the genome
- ✓ **High dynamic range** for CNA detection
- ✓ **Quick turnaround time** of 48-72 hours

D007 Acute Lymphoblastic Leukemia is a new generation panel detecting an extensive number of ALL-associated genes and regions, as well as gross copy number alterations (CNAs). Bring down lab-handling time and optimise your resources with its targeted approach.

Recurrent and clonal genetic alterations in different subtypes of Acute Lymphoblastic Leukemia (ALL) are well-characterised, and associated with differences in disease outcome. MRC Holland's SALSA® MLPA® technology has become a prime method in studying CNAs in ALL, especially *IKZF1^{del}*. D007 Acute Lymphoblastic Leukemia is based on the groundbreaking SALSA® digitalMLPA™ technology, which combines the broad scale of next generation sequencing with the unparalleled sensitivity in CNA detection of MLPA. In a single reaction, D007 Acute Lymphoblastic Leukemia can detect:

- Partial chromosome gains, losses and high-level amplifications
- Hyperdiploidy and hypodiploidy
- Intrachromosomal gene fusions
- Intragenic CNAs

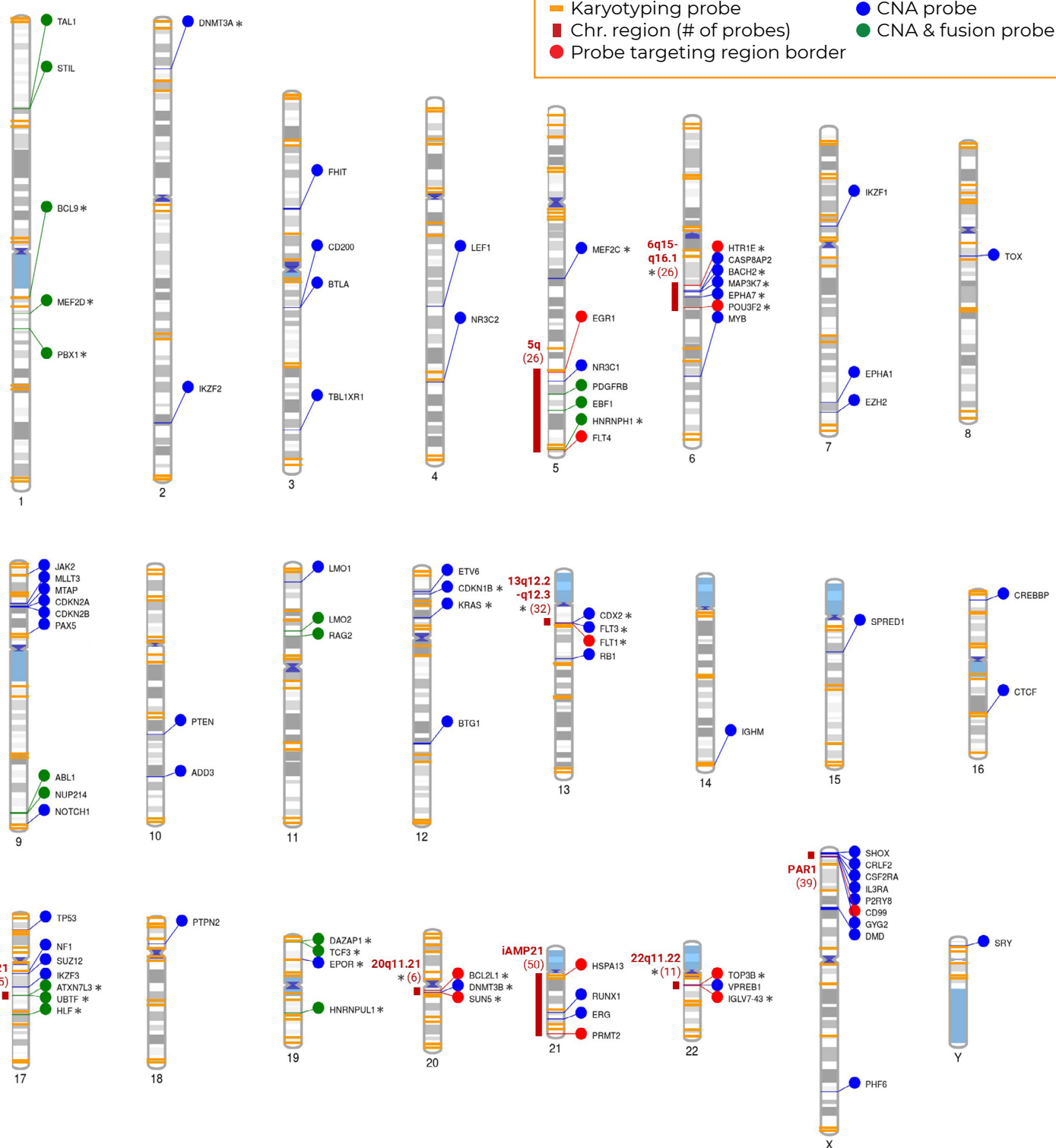
digitalMLPA can be run on any Illumina platform, can be combined with NGS libraries on the same flow cell, and is analysed using our free Coffalyser digitalMLPA™ software, meaning no bioinformatic skills are required.



D007 Acute Lymphoblastic Leukemia

- Combines genes and regions included in the well-established MLPA probemixes *P335 ALL-*IKZF1**, *P202 *IKZF1*-*ERG**, *P327 *iAMP21*-*ERG**, *P329 *CRLF2*-*CSF2RA*-*IL3RA**, *P383 T-ALL*, *P056 *TP53**.
- Allows for the examination of B-cell differentiation and cell cycle control genes, T-ALL-associated alterations, *iAMP21* and CNAs of the *PAR1* region, and much more.
- Examines subtelomeric, pericentromeric and middle regions of the chromosomal arms to detect gross CNAs and hyper-/hypodiploidy by using 250 karyotyping probes.

D007 Acute Lymphoblastic Leukemia: target genes & regions



Required materials

- 20 ng of sample DNA, peripheral blood or bone marrow-derived
- SALSA® digitalIMLPA™ probemix, reagents and barcode plates
- Thermocycler with heated lid
- Illumina sequencing platform (all types), flow cell and reagents

References

Benard-Slagter A et al. (2017). *J Mol Diagn.* 19:659-72.

For a full list of references, see assay page on mrcholland.com.