

CytoSure™ Genomic DNA Labelling Kits

Efficient and reproducible labelling of DNA samples for use in aCGH

The labelling of DNA samples used in array comparative genomic hybridisation (aCGH) is a critical step in the experimental process as poor labelling can result in inaccurate data.

OGT's CytoSure Genomic DNA Labelling Kits have been uniquely developed and optimised to enable rapid delivery of high quality results with high signal-to-noise ratios.

CytoSure Genomic DNA Labelling Kits deliver:

- ✓ Optimised formats to suit your throughput requirements
- ✓ Reliable high quality results through higher signal intensity
- ✓ Fast and simple procedure
- ✓ Everything you need, from reagents to plasticware

Optimised formats to suit your throughput requirements

CytoSure Genomic DNA Labelling Kits are available in 2 formats to suit your throughput requirements. The CytoSure Genomic DNA Labelling Kit enables labelling of 24 samples and is ideal for labs running one or two arrays a week. The CytoSure HT Genomic DNA Labelling Kit is designed specifically for high-throughput labs and allows simultaneous labelling of 96 samples. This plate-based format offers faster sample processing, a lower cost per sample and decreased sample-to-sample variation using a master mix format. It is also easier to automate and track samples.

Reliable high quality results

CytoSure Genomic DNA Labelling Kits have been rigorously tested with a wide range of sample types to ensure optimal performance. The unique formulation ensures superior signal-to-noise ratios allowing confident detection of copy number variation (Figure 1). This high signal-to-noise ratio means that even small aberrations can be reliably detected (Figure 2).

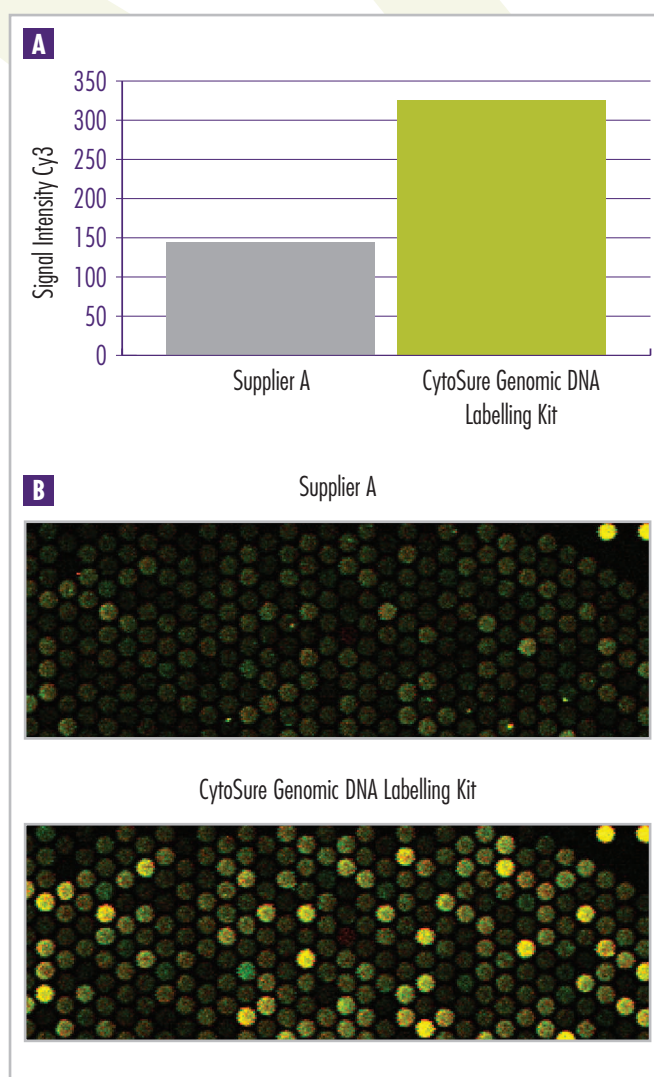


Figure 1: High signal intensity allowing easy and accurate spot detection. Control DNA (Promega) was labelled using the CytoSure Genomic DNA Labelling Kit and another commercially available kit (Supplier A). The labelled DNA was run on a standard Agilent array and the labelling intensity assessed by **A** Cy3 signal intensity and **B** visualisation as a Tiff file. The DNA labelled using the CytoSure Genomic DNA Labelling Kit exhibited far superior Cy3 signal intensity.

Fast and simple procedure

CytoSure Genomic DNA Labelling Kits offer much faster DNA labelling and clean up than traditional enzymatic labelling procedures. Labelling reactions using both the 24 and 96 reaction kits can easily be completed in a single day (Figure 3). The procedure can also be automated for implementation in high-throughput workflows.

Everything you need, from reagents to plasticware

OGT offers the complete labelling solution — protocols, reagents, clean-up plates or columns and collection tubes.

The unique kit formulation has been optimised for use with CytoSure arrays, which offer a wide variety of content and formats to suit your specific requirements. CytoSure arrays utilise 60-mer oligonucleotide probes, which are proven to offer higher signal-to-noise ratios and increased sensitivity and specificity¹.

CytoSure products provide a complete and integrated solution for cytogenetics in your lab — from DNA labelling and arrays to analysis software and full workflow automation.

For more information on CytoSure products and services, visit www.ogt.co.uk/cytosure.

Ordering Information

Product	Contents	Cat. No.
CytoSure Genomic DNA Labelling Kit	24 reactions: clean-up columns, dyes, nucleotide mix, random primers, enzyme, collection tubes	020020
CytoSure HT Genomic DNA Labelling Kit	96 reactions: 2 purification plates, nucleotide mix, random primers, enzyme	500040
Purification Plate	96-well purification plate	500041
CytoSure Interpret Software	Class-leading data analysis software with UPD functionality. Complimentary with all array purchases	020022
CytoSure ISCA arrays (4x44k, 4x180k, 8x60k)	Microarray with four or eight arrays, CytoSure Interpret Software	Various

References

1. Curtis, C. *et al* (2009) The pitfalls of platform comparison: DNA copy number array technologies assessed. *BMC Genomics* 10, 588-610

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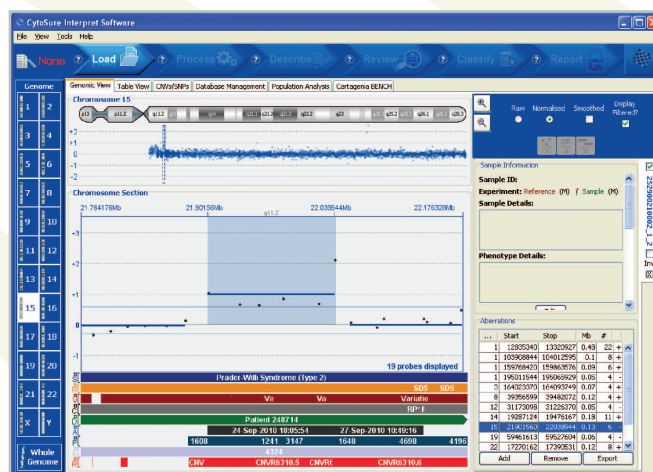


Figure 2: Reliable detection of small aberrations. DNA labelled using the CytoSure Genomic DNA Labelling Kit was run on a CytoSure ISCA 8 x 60K array. CytoSure Interpret Software combined with high DNA signal intensity allowed detection of a small (130 kb) DNA amplification.

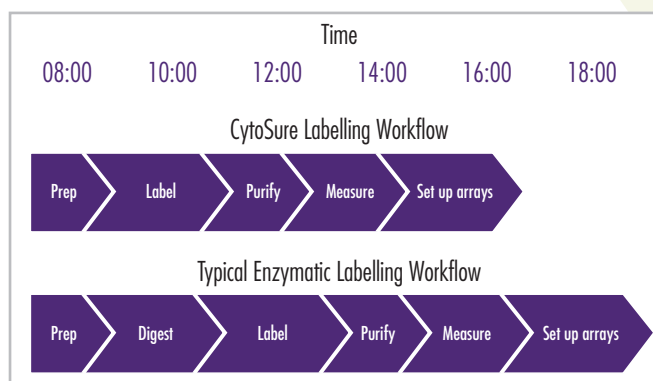


Figure 3: Two typical labelling workflows: With no need to digest, CytoSure Genomic DNA Labelling Kits save you at least 2 hours.