

SureTag Complete DNA Labeling Kit

Data Sheet



Key Features

- Efficient labeling provides reproducibility and confidence
- · High signal-to-noise ratio and low probe-to-probe variability maximize sensitivity
- Kit includes restriction digestion enzymes, clean-up columns, male and female reference DNA
- Optimized reagent formulation enables robust performance

Superior results and complete workflow for CGH, CGH+SNP and **CNV** microarray applications

The SureTag Complete DNA Labeling Kit is designed for superior labeling of DNA samples prior to microarray hybridization. The kit is optimized for Agilent CGH, CGH+SNP and CNV microarrays. It contains all components necessary to prepare genomic DNA for hybridization, including restriction enzymes and purification columns to enhance and streamline the workflow. The kit also includes genotyped male and female Human Reference DNA which are ideal for use with the Agilent CGH+SNP workflow.

The SureTag Complete DNA Labeling Kit delivers biologically equivalent results with enhanced performance relative to the Agilent Genomic DNA Enzymatic Labeling Kit and provides the highest quality data compared to other labeling methods. Our experimental results show superior yield and dye incorporation (Figure 1) as well as higher signal intensity and lower probe-to-probe variability (Figure 2) with the new SureTag kit. Agilent Reference DNA provides consistent performance compared to other reference DNA samples (Figure 3).

Higher yield Better dye incorporation 400 12 T Existing Existing pmol dye incorporated per rxn SureTag SureTag 350 10 300 DNA yield (µg) 8 250 200 6 150 4 100 2 50 0 Λ Cy5 Cv3 Cv5 Cv3

Superior labeling performance

Figure 1. Four replicate 500-ng DNA samples were labeled using the new SureTag Complete DNA Labeling Kit. The high yield and improved dye incorporation with the SureTag kit show superior labeling efficiency, providing confidence in your results.



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Superior hybridization performance

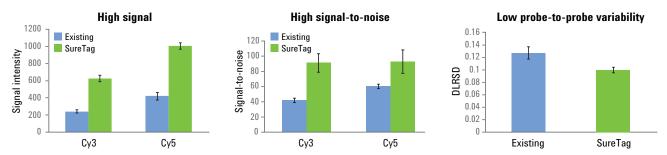


Figure 2. Four replicate 500-ng DNA samples were labeled using the new SureTag Complete DNA Labeling Kit. The samples were then hybridized to a SurePrint G3 Human CGH 4x180K microarray (P/N G4449A). The high signal-to-noise and median signal values show excellent hybridization performance, enabling a robust and sensitive platform.

Consistent performance between Agilent Human Reference DNA and other reference DNA samples

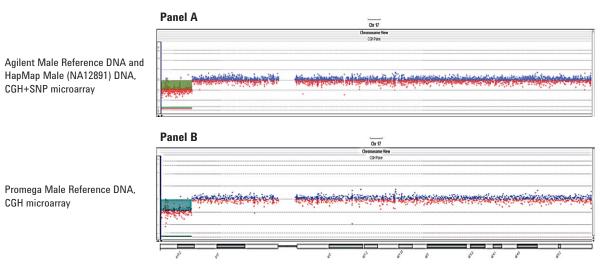


Figure 3. *Panel A. Comparison of copy number profiles for test sample NA09208 using either the Agilent Male Reference DNA or the HapMap Male (NA12891)* DNA sample. The data from the Agilent Reference DNA and the HapMap (NA12891) DNA samples are overlayed, showing no significant difference between *them. Panel B. Comparison of copy number profile using Promega Male DNA as a reference. SureTag Complete DNA Labeling Kit and an Agilent SurePrint G3 CGH+SNP 4x180K microarray (P/N G4890A) were used. A hemizygous deletion was observed on chromosome 17 using all reference DNA samples.*

Agilent CGH Microarray Reagent Portfolio

Processing Step	Product Name	Contents	Part Number
Sample Labeling	SureTag Complete DNA Labeling Kit	<i>Rsa-I, Alu-I</i> restriction enzymes, labeling reagents and dyes, purification columns, male and female reference DNA	5190-4240
Sample Hybridization	Oligo aCGH/ChIP-on-chip Hybridization Kit	Hybridization and blocking reagents	5188-5220 (25) 5188-5380 (100)
Sample Hybridization	Human Cot-1 DNA	Human nonspecific hybridization blocking reagent	5190-3393
Microarray Wash	Oligo aCGH/ChIP-on-chip Wash Buffer Kit	Oligo aCGH wash buffers	5188-5226

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