# CYTAG® SuperCGH Labeling Kit

Superior labeling efficiency for low input samples, with greater sensitivity and a simpler workflow

Comparative genomic hybridization (aCGH) is a powerful diagnostic tool for detecting DNA copy number gains and losses associated with chromosome abnormalities. aCGH provides an understanding of genetic disorders, cancers and other genomic aberrations.

With optimized, proprietary reagents, Enzo's CYTAG<sup>®</sup> SuperCGH Labeling Kits for oligo arrays produce high quality data using as little as 50 ng of genomic DNA, without a need for pre-amplification for precious low input samples.

Citations: 2

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## **Ordering Information**

**Order Online** »

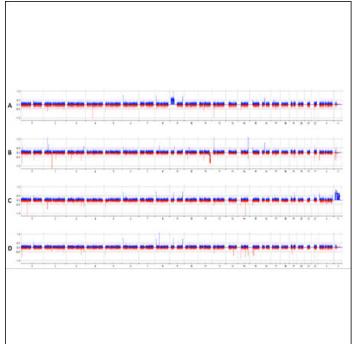
ENZ-GEN120-0010	2x10Reactions
ENZ-GEN120-0100	2x100Reactions

Manuals, SDS & CofA

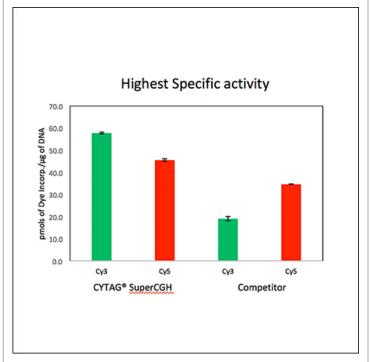
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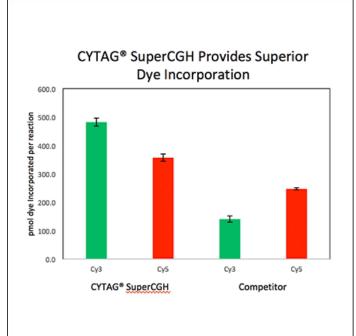
- Suitable for previously limiting low input samples, including precious biopsy samples
- Validated for blood, amniotic fluid, postnatal, and oncology samples
- Provides excellent dynamic analytical range down to 50 ng
- Shorter workflow has samples ready for hybridization in < 4 hours
- Superior DLR scores (0.09-0.12) exceeding industry standards
- Ability to perform total genomic DNA analysis without amplification or complexity reduction





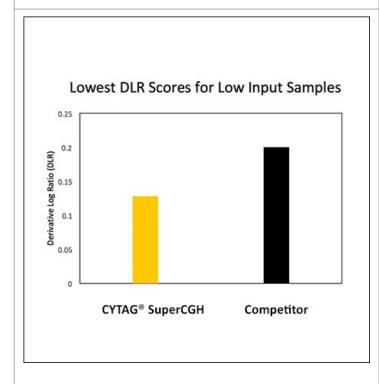
Analysis of patient samples using 50 ng DNA input on oligonucleotide microarray (Agilent 4 x 180K, CGH); A) Patient with Trisomy 9 showing duplication of Chromosome 9 (9p24.2-p11.2): DLRs = 0.149; B) Patient with Jacobsen Syndrome showing deletion of Chromosome 11 (11q24.1-q25): DLRs = 0.123; C) Amniotic sample 3: DLRs = 0.121; D) Amniotic sample 4: DLRs = 0.125





50 ng DNA samples were labeled with Enzo's CYTAG<sup>®</sup> SuperCGH Labeling Kit for Oligo Arrays or a leading competitor's kit. Enzo's proprietary labeling technology generates the highest specific activity of labeling for Cy3 and Cy5.

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SuperCGH delivers low DLR scores across a dynamic analytical range

O.2

O.18

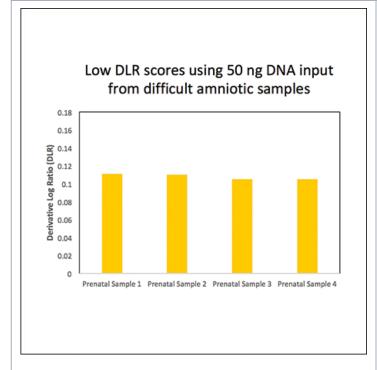
O.10

O.14

O.10

Comparative analysis of 50 ng DNA samples labeled with Enzo's CYTAG<sup>®</sup> SuperCGH Labeling Kit or that of a leading competitor demonstrates significantly lower DLR scores.

 $\mathsf{CYTAG}^{\circledR}$  SuperCGH labels DNA across a dynamic analytical range



50 ng DNA input from 4 different amniotic prenatal samples were labeled using CYTAG<sup>®</sup> SuperCGH Labeling Kit and applied to an 8 x 60K array, showing consistently low DLR scores.

### **Handling & Storage**

**Use/Stability** Stable for at least one year after receipt when stored as recommended.

**Handling** Protect Super Cyanine 3- and 5-dUTPs from light at all times. Avoid freeze/thaw cycles.

Long Term Storage -20°C

Shipping Dry Ice

## Regulatory Status RUO - Research Use Only

#### **Product Details**

**Application** CGH

**Application Notes** Validated on Agilent SurePrint Microarrays.

Contents -0010 size:

**ENZ-GEN120-0010**: Primers/Reaction Buffer, 1 x 400 μL; Super Cyanine 3-dUTP Nucleotide Mix, 1 x 100 μL; Super Cyanine 5-dUTP Nucleotide Mix, 1 x 100 μL; Klenow DNA Polymerase, 1 x 40 μL; Stop Buffer, 1 x 100 μL; Nuclease-free Water, 1 x 1 mL; PCR & Gel Clean-up columns, 20 tests

#### -0100 size:

ENZ-GEN120-0100: Primers/Reaction Buffer, 1 x 4 mL; Super Cyanine 3-dUTP Nucleotide Mix, 1 x 1 mL; Super Cyanine 5-dUTP Nucleotide Mix, 1 x 1 mL; Klenow DNA Polymerase, 1 x 0.4 mL; Stop Buffer, 1 x 1 mL; Nuclease-free Water, 1 x 10 mL; PCR & Gel Clean-up columns, 200 tests

PCR & Gel Clean-up Columns can be re-ordered using ENZ-GEN100

#### Technical Info / Product Notes

#### **Application Note:**

Using CYTAG® SuperCGH Labeling Kit for the Analysis of FFPE Oncological Samples by CGH.

Automated Liquid Handling for High Throughput DNA Labeling with CYTAG® SuperCGH Labeling Kit.

Sensitivity of Comparative Genomic Hybridization Using Artificial Mosaicism and Small DNA Quantities.

Labeling of Small DNA Quantities With CYTAG® SuperCGH Labeling Kit for Prenatal Diagnostics.

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