HUMAN HEALTH

ENVIRONMENTAL HEALTH

ARRAY CGX

CGX Oligo Arrays
Simplifying Cytogenetics

CGX Oligo Arrays are microarrays specifically designed, developed and verified by Signature Genomics for the detection of small genetic aberrations associated with learning disability and dysmorphic features in research applications. The oligonucleotide probes on the CGX™, CGX™-HD and CGX™-SNP arrays distributed throughout the genome with specific focus on over 245 cytogenetically relevant regions, 980 functionally significant genes, pericentromeric regions, and subtelomeres.

Our arrays and reagents, together with our Genoglyphix software package allow a successful, streamlined and simple cytogenetic analysis workflow in your laboratory.

CGX Oligo
Arrays characteristics that will benefit your work

- Proven design, representing over 245 known syndromic regions and over 980 functionally significant genes
- Three different array types based on the same design to adjust for throughput and detection requirements including AOH (Absence of Heterozygosity) and UPD (Uniparental Disomy) detection
  - **CGX™**
  - **CGX™-HD**
  - **CGX™-SNP**
- All designs updated to HG19

CGX™	CGX™-HD	CGX™-SNP
• 8-plex array for detection of copy number abnormalities	• 4-plex array for detection of copy number abnormalities	• 4-plex array for detection of copy number abnormalities and Absence of Heterozygosity (AOH) and Uniparental Disomy (UPD)
• Resolution of ~190 kb in the backbone, and ~28 kb in the targeted regions	• Resolution of ~40 kb in the backbone, and ~20 kb in the targeted regions	• Resolution of ~80 kb in the backbone, and ~20 kb in the targeted regions
• Evaluation of over 245 recognized genetic syndromes and over 980 gene regions of functional significance in human development	• Evaluation of over 245 recognized genetic syndromes and over 980 gene regions of functional significance in human development	• Evaluation of over 245 recognized genetic syndromes and over 980 gene regions of functional significance in human development
• Covers subtelomeric and pericentromeric regions	• Covers subtelomeric and pericentromeric regions	• Covers subtelomeric and pericentromeric regions
		• Detection of contiguous stretches of AOH (<10 Mb)
		• Detection of triploidy

Not for distribution in the USA

PerkinElmer®
For the Better

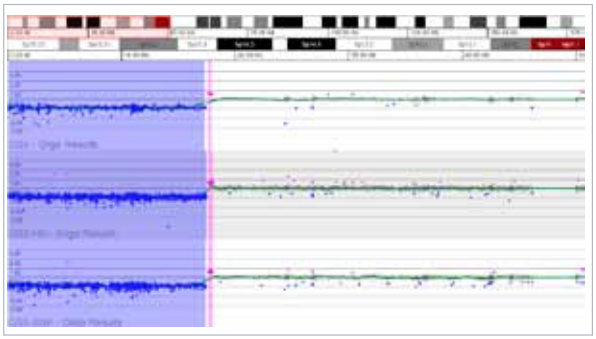
CGX Oligo Arrays

All CGX Oligo arrays offer whole genome coverage, with specific cytogenetically relevant regions targeted in higher resolution. The same design approach was used across all three array formats to provide flexibility with regards to throughput needs and resolution requirements.

Furthermore, with the addition of CGX™-SNP arrays to our cytogenetic array portfolio we now offer researchers the ability to detect Absence of Heterozygosity (AOH) and UPD (Uniparental Disomy) across the genome.

Our complementary array designs allow you to design the experiment to your requirements and offer an enhanced capability to detect and characterize chromosome imbalances that are too small to be identified by conventional karyotyping.

Figure 1



The data shown here demonstrate the high level of reproducibility achieved with all three array formats using a representative research sample with a 8.14 Mb deletion in the Cri-du-Chat region, followed by a small 328 kb duplication on chromosome 5p.

Figure 2

Figure 2 shows the result of a chr7 UPD research sample analyzed on the CGX™ SNP array. While no copy number change can be observed in this research sample, the SNP analysis clearly identifies UPD across chromosome 7.

ORDERING INFORMATION

Part Number	Description	Comment
4113-0010	CGX™ HD/SNP Gasket Slides-100	Research Use Only
4114-0010	CGX™ Gasket Slides-100	Research Use Only
4115-0010	CGX™ HD/SNP Gasket Slides-20	Research Use Only
4116-0010	CGX™ Gasket Slides-20	Research Use Only
4117-0010	CGX™ Ozone-barrier slide covers	Research Use Only
4118-0020	CGX™ (2 slides per pack)	Research Use Only
4119-0020	CGX™ (4 slides per pack)	Research Use Only
4122-0020	CGX™ HD (2 slides per pack)	Research Use Only
4123-0020	CGX™ HD (4 slides per pack)	Research Use Only
4124-0020	CGX™ SNP (2 slides per pack)	Research Use Only

Part Number	Description	Comment
4125-0020	CGX™ SNP (4 slides per pack)	Research Use Only
1015-0010	CGX™ Hybridization chamber, stainless	Research Use Only
1015-0040	CGX™ Hybridization oven	Research Use Only
1015-0030	CGX™ Hybridization oven rotator	Research Use Only
4130-0010	CGX™ Cot-1 Human DNA	Research Use Only
4131-0010	CGX™ Oligo aCGH Hybridization Kit	Research Use Only
4132-0010	CGX™ Oligo aCGH Wash Kit	Research Use Only
4135-0010-P4	CGX™ DNA Labeling Kit – Purification Columns	Research Use Only
4134-0010	CGX™ Stabilization and Drying Solution	Research Use Only
4135-0010	CGX™ DNA Labeling Kit	Research Use Only

CGX Oligo Arrays are Research Use Only products. Not for use in diagnostic procedures.
CGX Oligo Arrays are designed by Signature Genomics and manufactured by Agilent Technologies, Inc.

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