KromaTiD

DATA SHEET

KromaTiD's directional Genomic Hybridization™ Cytogenetics Assay Suite for Genotoxicity and Genome Instability

The dGH™ Cytogenetics Assay Suite provides you with the highest resolution genome wide data to assess the structural integrity of your engineered genomes. It includes tools for unbiased whole genome analysis as well as target- tracking and analysis. **These tools yield data that allows you to optimize your edits, qualify your therapies and answer the questions that matters most – are there any unwanted and potentially risky by-products in my batches of edited cells?**

1. **dGH in-Site™** gives researchers the ability to directly visualize and characterize the outcomes of cellular engineering by any method, including CRISPR edits, lentiviral integrations or transposons. Using synthetic oligo probes and repeat-free bioinformatic design, dGH In-Site™ is capable of measuring a variety of chromosomal abnormalities. These include edit site translocations, inversions, copy number variants, viral integrations, and other complex rearrangements larger than 3Kb. With dGH In-Site™, you get:
   - A single-cell, whole genome, method for direct visualization of inserts and edit site structural variation.
   - Custom probes designed for your integrant sequence, or your genomic target edit sites.
   - Mapping of on target and random transgene integrations anywhere in the genome.
   - Detection of on and off-target structural variants genome wide.
   - Integrational enumeration and estimated copy numbers per sample, per cell and even per chromosome from clones or heterogeneous cell populations.
   - The highest resolution, highest sensitivity measurement of your editing outcomes.

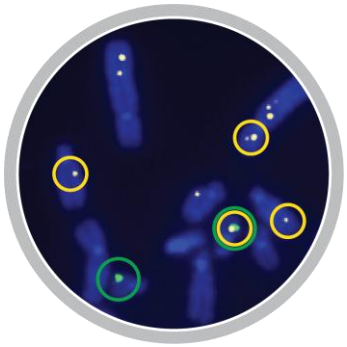

Figure 1: Example dGH In-Site™ Assay performed by KromaTiD. Green signal denotes correct insert location. Yellow signals are the on/off target integrations.

2. **dGH SCREEN™** covers every unique sequence in the genome for the ultimate single cell, unbiased assessment of structural variants and their prevalence in any dividing sample. dGH SCREEN™ gives you the ability to directly visualize structural variants at any location within the genome, regardless of their cause. With dGH SCREEN™ you get:
   - Unbiased, single cell, high-resolution whole-genome stability analysis.
   - Detection of translocations, inversions, and complex rearrangements with a lower limit of detection of 5Kb.
   - A true profile of structural heterogeneity throughout your edited cells populations.
   - An efficient measure of stability of your clones and cell lines.

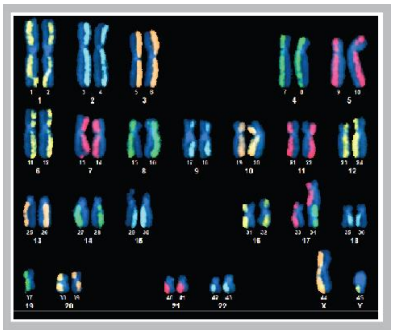

Figure 2: Example dGH SCREEN™ karyotype performed by KromaTiD.

3. **G-Banding** is a non-genomic staining method for orthogonal confirmation of your dGH SCREEN™ results.
   - Standard karyotyping and identification of karyotypic abnormalities.
   - Chromosome identification and enumeration.
   - Detection of chromosome abnormalities and structural rearrangements such as translocations and inversions greater than 5-10Mb.

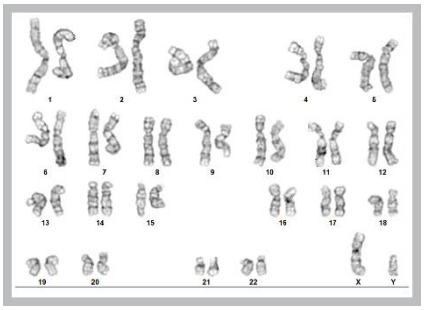

Figure 3: Example G-Banding karyotype performed by KromaTiD.

The FDA has drafted guidance for the comprehensive analysis of gene editing prior to IND filing. If you are concerned about manufacturing guidelines and preclinical data evaluation and want to understand the outcomes of your edits/inserts and the potential risks of structural variation, KromaTiD's directional Genomic Hybridization™ Cytogenetics Assay Suite is your answer.

Contact us today to get started!

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