Data Sheet

dGH in-Site™

What is dGH in-Site?

dGH in-Site probes harness KromaTiD's Directional Genomic Hybridization technology to provide whole genome tracking of inserted DNA cassettes as small as 2 kilobases. Unidirectional dGH probes provide a single cell, genome-wide perspective of cellular engineering outcomes, including tracking of viral and non- virally mediated DNA integration (CRISPR/Cas and alternative systems).

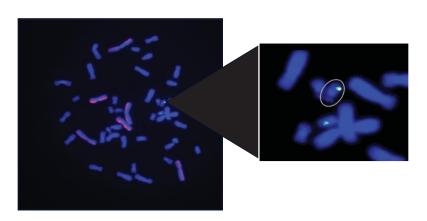
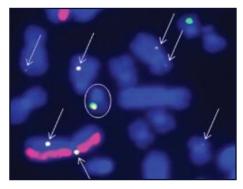


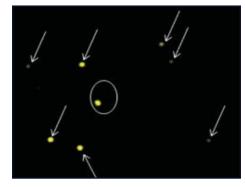
Figure 1: dGH in-Site assay in a CRISPR/Cas edited iPSC, demonstrating both on-target and random integration of insert sequence (yellow) throughout the genome.

Benefits of in-Site

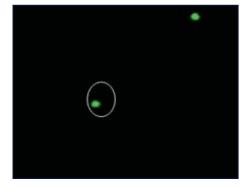
- On- and off-target integration metrics.
- Clean integration data, even from complex or heterogeneous cell populations.
- A unique, whole genome, orthogonal method of direct visualization of inserts, without bioinformatic prediction of outcomes.
- Multi-channel fluorescence for flexible and multiplex assay design Available for human, murine, canine, non-human primate and CHO cells.



Channel 1: Fluorescence channels over laid, insert and bracketing probes both visible on one copy of target chromosome and off target inserts visible in multiple chromosomes.



Channel 2: Yellow fluorescence channel, on-target insertion visible on one homolog (circled) and multiple off-target sites throughout genome.



Channel 3: Green fluorescence channel. Bracketing probes visible on both homologs of target chromosome. Circled green probe signal shows insertion (seen on channel 2) while un-circled does not.



Working with KromaTiD is Easy!



Figure 2: Example workflow with KromaTiD running in-Site assay on engineered lines in house.

As an orthogonal analysis to PCR/sequencing techniques, dGH in-Site assays enable, through direct visualization, definitive single-cell measurements of structural variants throughout the genome.

Offering the lowest limit of detection of integrated or genomic DNA targets by fluorescence, dGH in-Site is the most comprehensive tool available for researchers to track genome-wide distribution and orientation of transgenes, inserts and edit site rearrangements.

Catalog	Product	List Price
DGH-001	in-Site Adherent/Suspension Culture Development: Thaw, recovery, and harvest optimization	\$1,000.00
DGH-009	in-Site T-Cell Culture Development: Thaw, recovery, and harvest optimization	\$1,200.00
DGH-010	in-Site IPSC Cell Culture Development: Thaw, recovery, and harvest optimization	\$1,300.00
DGH-011	in-Site Whole Blood Culture Development: Thaw, recovery, and harvest optimization	\$900.00
DGH-002	in-Site Standard Probe Production: Design and verification of standard probes	\$1,100.00
DGH-003	in-Site Assay Execution and Analysis: Imaging and scoring for 4 probe assay, 200 cells counted per sample	\$7,775.00
DGH-004	in-Site Assay Execution and Analysis: Imaging and scoring for 3 probe assay, 200 cells counted per sample	\$5,742.00
DGH-005	in-Site Assay Execution and Analysis: Imaging and scoring for 2 probe assay, 200 cells counted per sample	\$4,642.00
DGH-006	in-Site Assay Execution and Analysis: Imaging and scoring for 1 probe assay, 200 cells counted per sample	\$3,542.00
DGH-007	in-Site Custom Probe Production: Design and verification of custom probes	\$5,500.00
DGH-008	in-Site Adherent/Suspension Metaphase Prep and Harvest	\$1,000.00
DGH-012	in-Site T Cells Metaphase Prep and Harvest	\$1,200.00
DGH-013	in-Site IPSC Metaphase Prep and Harvest	\$1,300.00
DGH-014	in-Site Whole Blood Metaphase Prep and Harvest	\$900.00
DGH-015	in-Site Assay Execution and Analysis: Imaging and scoring for 4 probe assay, 20 cells counted per sample	\$1,166.25
DGH-016	in-Site Assay Execution and Analysis: Imaging and scoring for 4 probe assay, 50 cells counted per sample	\$2,429.69
DGH-017	in-Site Assay Execution and Analysis: Imaging and scoring for 4 probe assay, 20 cells counted per sample with two quadrants per slide	\$758.06
DGH-018	in-Site Assay Execution and Analysis: Imaging and scoring for 4 probe assay, 50 cells counted per sample with two quadrants per slide	\$1,579.30
DGH-019	in-Site Assay Execution and Analysis: Imaging and scoring for 4 probe assay, 20 cells counted per sample with four quadrants per slide	\$492.74
DGH-020	in-Site Assay Execution and Analysis: Imaging and scoring for 4 probe assay, 50 cells counted per sample with four quadrants per slide	\$1,026.54

For more information on how KromaTiD can transform your research, please contact sales@kromatid.com!