

KROMASURE™ InSite

dGH for Edit Site Integrity and Transgene Mapping

Throughout the entire Cell and Gene therapy process, from R&D to the clinic, characterization of the genome is a critical component of ensuring the edit integrity of each Gene editing platform. Whether the process involves a single locus or multiple edit sites, KROMASURE InSite can detect small structural variants and transgene inserts, providing confidence for edit integrity.

Utilizing proprietary Advanced Fluorescent Hybridization technology (dGH) KROMASURE InSite provides direct visualization of structural variants and transgene integration on a single cell basis, including translocations, inversions, and copy number variants. Customized assays are developed to your specific target sites and provide additional orthogonal single-cell data to add to the data packages from other techniques such as Sequencing.

EDIT SITE AND TRANSGENE MAPPING



Exceptional lower limit of detection (LLOD) translates to \approx 2KB transgene fluorescent detection



Probes are universal and will work in metaphase dGH, metaphase FISH, and interphase FISH assays



Can be multiplexed with other locus-specific probes and/or chromosome paints.



Off-target complex chromosomal abnormalities (such as dicentric formation and chromothripsis) are tracked across the genome along with the specific targeted edit site structural variants

WHAT IT DETECTS

- Chromosomal structural variants involving the integration site or other targets of interest
- Insert copy number and cell-by-cell distribution
- Orientation of transgene integration (in metaphase dGH)