



Agilent Technologies  
Next-Generation Sequencing



# SURELY BETTER AUTOMATION

SURESELECT<sup>XT</sup> AUTOMATED LIBRARY PREP AND CAPTURE KITS

The Measure of Confidence



Agilent Technologies

# SURELY BETTER **AUTOMATION**

Agilent's SureSelect<sup>XT</sup> Automated Library Prep and Capture Kits

Agilent's SureSelect<sup>XT</sup> Automated Library Prep and Capture Kits, provide a total reagent and automation solution designed to streamline the sample preparation of next generation sequencing workflow. Validated as a complete automated solution with Agilent's NGS Sample Preparation Workstation, these kits enable you to maximize your throughput and productivity— while continuing to provide the highest quality of data.

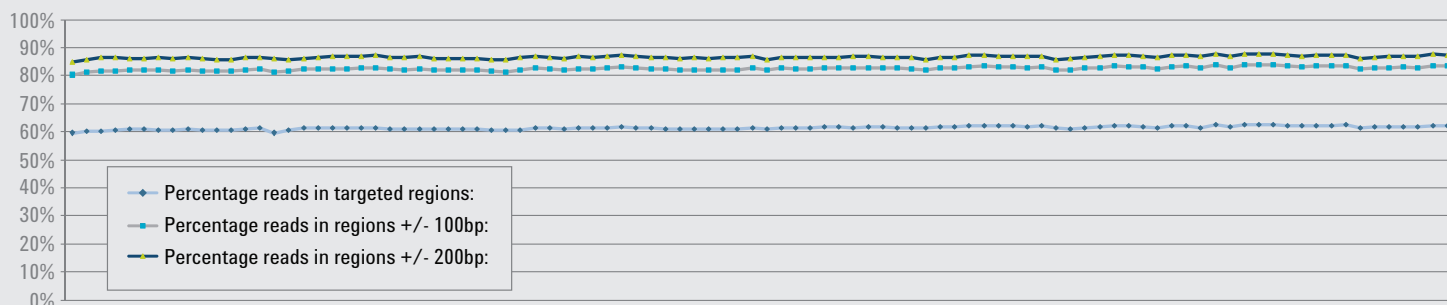
- Reduce hands-on time by greater than 80% and increase throughput to 192 samples (two, 96-well plates) per work week
- Decrease variability and improve reproducibility
- Increase scalability by choosing either 96, 480 or 960 reaction size kits
- Complete validated solution of reagents, instrumentation and protocols for the illumina NGS platform

## REPRODUCIBILITY

Whether working with a small capture (SureSelect Human Kinome kit, 3.2Mb), a large capture (SureSelect Human 50Mb Exome kit) or any size custom design the robust SureSelect Automation Protocols provide the reproducibility you've come to expect with all SureSelect products.

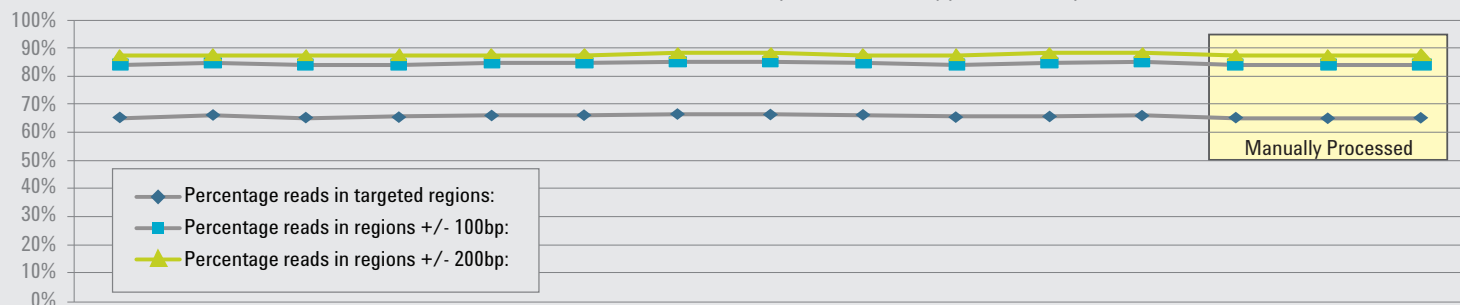
### SureSelect Human Kinome Reactions

96 SureSelect Human Kinome samples processed in one run



### SureSelect Human All Exon 50Mb

12 Automated SureSelect Human All Exon 50Mb samples and 3 manually processed samples



96 SureSelect Human Kinome reactions and 12 SureSelect Human Exome 50Mb reactions were prepared using the Agilent Automated SureSelect Library Prep and Capture Solution. Additionally 3 independently prepared manual samples were run with the exome captures. Results show excellent reproducibility with a high percentage of reads on target and even higher percentages, within +/- 100 bp or +/- 200 bp independent of capture size. The SureSelect Human Exome data shows equivalent performance of the captures regardless of manual or automated preparation of the samples.

# SURELY BETTER PERFORMANCE

Agilent's SureSelect<sup>XT</sup> Automated Library Prep and Capture Kits

## SENSITIVITY

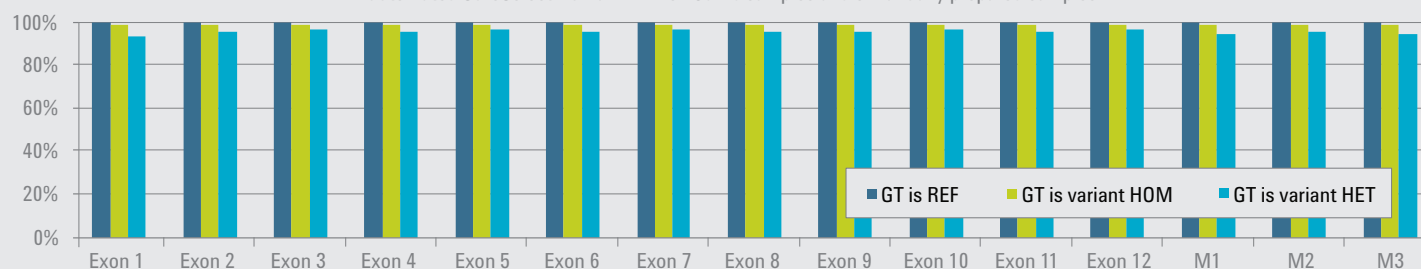
### Allelic Balance

12 automated SureSelect Human All Exon 50Mb samples and 3 manually prepared samples



### Concordance vs HapMap

12 automated SureSelect Human All Exon 50Mb samples and 3 manually prepared samples



The Automated SureSelect Library Prep and Capture System maintains excellent allelic balance, strong concordance and sensitivity versus HapMap samples allowing you to process samples with the confidence of manual SureSelect preparations and ease of automation. Genotype (GT) reference (REF) match reported sequence and are captured at > 99.9% efficiency. Homozygous (HOM) and heterozygous (HET) variants are captured with equally high efficiency at > 97%.

## THROUGHPUT

|                           | MANUAL METHOD |                                         | AUTOMATED METHOD |                                         |
|---------------------------|---------------|-----------------------------------------|------------------|-----------------------------------------|
|                           | Hands-On Time | Maximum Number of Samples Processed/Day | Hands-On Time    | Maximum Number of Samples Processed/Day |
| Library Prep              | 375           | 20                                      | 25               | 96                                      |
| PreCapture PC             | 90            | 20                                      | 13               | 96                                      |
| Hybridization Preparation | 60            | 20                                      | 7                | 96                                      |
| Capture                   | 210           | 20                                      | 20               | 96                                      |
| PostCapture PC            | 90            | 20                                      | 40               | 96                                      |
| Total Minutes             | 825           | 20-40 per week                          | 105              | 96-192 per week                         |
| Total Hours               | 13.75         |                                         | 1.75             |                                         |

- Increase Throughput and Reproducibility
- Improve Efficiency
- Process up to 192 Samples Per Week

| PRODUCT                                                           | CATALOG NUMBERS |           |           |
|-------------------------------------------------------------------|-----------------|-----------|-----------|
|                                                                   | 96 rxns.        | 480 rxns. | 960 rxns. |
| SureSelect <sup>XT</sup> Auto Human All Exon v.2 kit              | G7542Q          | G7542R    | G7542S    |
| SureSelect <sup>XT</sup> Auto Human All Exon v.2 Plus Kit         | G7543Q          | G7543R    | G7543S    |
| SureSelect <sup>XT</sup> Auto Human All Exon 50Mb Kit             | G7544Q          | G7544R    | G7544S    |
| SureSelect <sup>XT</sup> Auto Human All Exon 50Mb Plus Kit        | G7545Q          | G7545R    | G7545S    |
| SureSelect <sup>XT</sup> Auto Human X-Chromosome Panel Kit        | G7560Q          | G7560R    | G7560S    |
| SureSelect <sup>XT</sup> Auto Human Kinome Panel Kit              | G7562Q          | G7562R    | G7562S    |
| SureSelect <sup>XT</sup> Auto Human Kinome Panel Plus Kit         | G7563Q          | G7563R    | G7563S    |
| SureSelect <sup>XT</sup> Auto Mouse All Exon Kit                  | G7550Q          | G7550R    | G7550S    |
| SureSelect <sup>XT</sup> Automation Custom MP1 (<200kb) Kit       | G7530Q          | G7530R    | G7530S    |
| SureSelect <sup>XT</sup> Automation Custom MP2 (200kb-499kb) Kit  | G7531Q          | G7531R    | G7531S    |
| SureSelect <sup>XT</sup> Automation Custom MP3 (500kb-1.49Mb) Kit | G7532Q          | G7532R    | G7532S    |
| SureSelect <sup>XT</sup> Automation Custom MP4 (1.5Mb-2.99Mb) Kit | G7533Q          | G7533R    | G7533S    |
| SureSelect <sup>XT</sup> Automation Custom MP0 (3.0Mb-6.8Mb) Kit  | G7534Q          | G7534R    | G7534S    |

To learn more about SureSelect and products for next-generation sequencing,  
please visit [www.agilent.com/genomics/sureselect](http://www.agilent.com/genomics/sureselect)

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