



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.

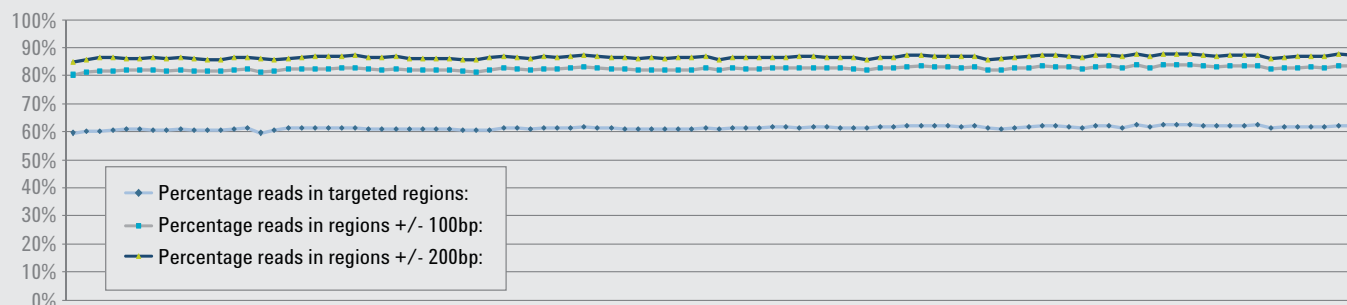
- Reduce hands-on time by greater than 80% and increase throughput to 192 samples (two, 96-well plates) per work week
- Decrease variability and improve reproducibility
- Increase scalability by choosing either 96, 480 or 960 reaction size kits
- Complete validated solution of reagents, instrumentation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

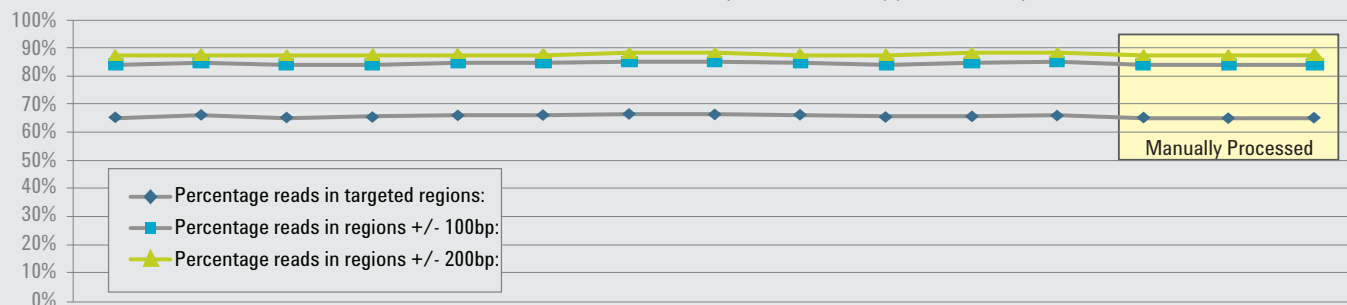
### SureSelect Human Kinome Reactions

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.

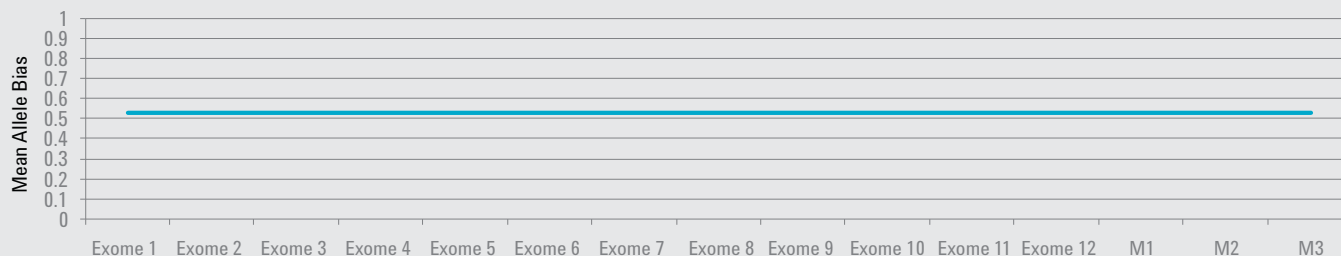
# SURELY BETTER **PERFORMANCE**

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

## SENSITIVITY

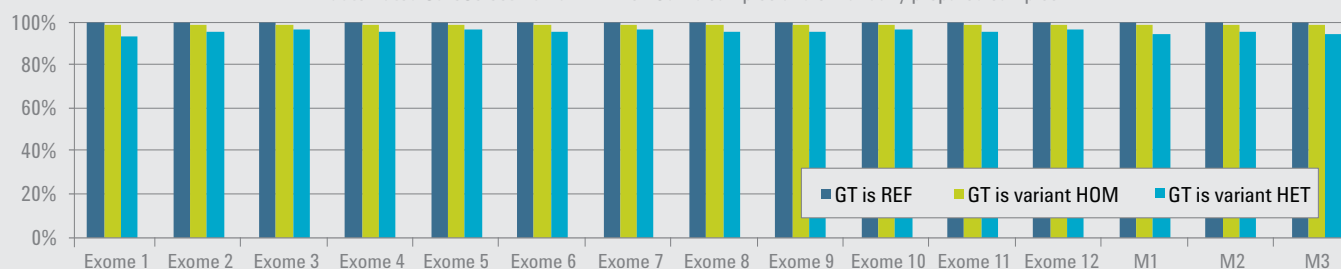
### Allelic Balance

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	

\*per 5 day single shift work week

- 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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