

SureSelect

SureSelect^{XT} Kits...A Surely Better Workflow Solution

Agilent SureSelect Target Enrichment System

SureSelect^{XT} Kits extend the world's leading target capture technology by offering a complete workflow for next-generation sequencing. SureSelect^{XT} Kits include a SureSelect Target Enrichment Kit along with an optimized genomic DNA prep kit and a library prep kit. The validated sample prep-to-sequencing target enrichment workflow is fully compatible with both Illumina and SOLiD next-generation sequencers.

SureSelect^{XT} Kits cover a range of capture sets and come in multiple configurations, including all exons, panels, kinome, custom and other species. Our eArray portal allows for custom designs, from <200 Kb up to 6.8 Mb. Optimized protocols make it easy to combine sample prep and target enrichment, providing seamless integration for a complete NGS workflow.

- Fully integrated gDNA prep kit and library prep kit
- Single 24-hour hybridization enrichment
- 120-mer RNA oligos for unsurpassed allelic balance
- Ability to capture SNPs, indels and CNVs
- · Support for single-end, paired-end, and multiplexing on Illumina and SOLiD NGS systems



Performance of the SureSelect^{XT} Kit



samples: GM12156 human cell line (Sample 1), kidney (Sample 2) and stomach (Sample 3). For this experiment, genomic DNA was purified with the the SureSelect^{XT} Genomic DNA Extraction Kit and library preparation was performed with SureSelect^{XT} Library Prep Kit. The capture was performed with SureSelect Human X Chromosome Baits (3 Mb).



The Measure of Confidence



Figures 2 and 3. Sensitivity and concordance with HapMap is very high and reproducible across different samples, for a SureSelect^{XT} 50 Mb All-exon capture. REF denotes SNPs called with the same genotype as the reference genome. Variant HOM denotes called SNPs that are genotyped as non-reference homozygous. Variant HET denotes called SNPs that are genotyped as non-reference heterozygous.



Figures 4 and 5. Sensitivity and concordance with HapMap is very high and reproducible across different samples, for the capture performed with the SureSelect^{XT} Kinome Kit. REF denotes SNPs called with the same genotype as the reference genome. Variant HOM denotes called SNPs that are genotyped as non-reference homozygous. Variant HET denotes called SNPs that are genotyped as non-reference heterozygous.

SureSelect ^{XT} Catalog Kits

Reactions/Kit	Human All Exon	Human All Exon Plus	Human All Exon v.2	Human All Exon 50 Mb	Human Kinome
5	G7540A	G7541A	G7542A	G7544A	G7562A
10	G7540B	G7541B	G7542B	G7544B	G7562B
25	G7540C	G7541C	G7542C	G7544C	G7562C
50	G7540D	G7541D	G7542D	G7544D	G7562D
100	G7540E	G7541E	G7542E	G7544E	G7562E
250	G7540F	G7541F	G7542F	G7544F	G7562F
500	G7540G	G7541G	G7542G	G7544G	G7562G
1000	G7540H	G7541H	G7542H	G7544H	G7562H
2000	G7540J	G7541J	G7542J	G7544J	G7562J
5000	G7540K	G7541K	G7542K	G7544K	G7562K
10000	G7540L	G7541L	G7542L	G7544L	G7562L

SureSelect ^{XT} Custom Kits

Reactions/Kit	Custom MP1	Custom MP2	Custom MP3	Custom MP4	Custom MP0
10	G7530A	G7531A	G7532A	G7533A	G7534A
25	G7530B	G7531B	G7532B	G7533B	G7534B
50	G7530C	G7531C	G7532C	G7533C	G7534C
100	G7530D	G7531D	G7532D	G7533D	G7534D
250	G7530E	G7531E	G7532E	G7533E	G7534E
500	G7530F	G7531F	G7532F	G7533F	G7534F
1000	G7530G	G7531G	G7532G	G7533G	G7534G
2000	G7530H	G7531H	G7532H	G7533H	G7534H
10000	G7530J	G7531J	G7532J	G7533J	G7534J

SureSelect ^{x7} Catalog Demo Kits

Reactions/Kit	Description	Part Number
5	SureSelect ^{x7} Human X-Chromosome Kit	G7560A

Menu of Catalog and Custom Products

Product	Description
SureSelect ^{xr} Kits	
SureSelect Target Enrichment Kit—plus optimized gDNA Prep Kit and Library Prep Kit	Fully validated, integrated solution for targeted re-sequencing on the Illumina and SOLiD NGS platforms
SureSelect ^{xr} Custom Kits	
Single-end, paired-end, multiplexing formats (support for Illumina, and SOLiD platforms)	Design custom target enrichment kits from <200 Kb to over 6.8 Mb with eArray (10-5,000 reactions)
SureSelect ^{xr} Exome Target Enrichment Kits	
• Human Kits, 38-50 Mb Target Size • Mouse Kits, 50 Mb Target Size • Other Model Organisms—please enquire	Industry-leading target enrichment kits—the most comprehensive line of exome captures (5-10,000 reactions)
SureSelect ^{xr} Panels	
• Human Kinome Kit, 3.2 Mb • Human X Chromosome Kit, 3.1 Mb • Other Pre-defined Kits available—please enquire	Focused target capture with multiplexing for maximum efficiency (5-10,000 reactions)
SureSelect ^{xr} Plus	
Add up to 6.8 Mb of additional custom content to SureSelect catalog kits — enquire to add >6.8 Mb	Increased flexibility—leverage catalog and custom content in one SureSelect design (5-10,000 reactions)
SureSelect ^{xr} Library Prep and Capture Automation System	
Complete target enrichment automation solution based on the Bravo Automated Liquid Handling Platform	Includes everything needed to leverage automation for maximum reproducibility, uniformity and throughput
Agilent Next-Generation Sequencing Products	
 Adaptor Kits Herculase II Fusion DNA Polymerase Agilent 2100 Bioanalyzer qPCR Library Quantification Kits 8800 Thermal Cycler/Mx3000P/Mx3005P 	 Single-plex and multiplex sequencing formats Superior PCR yields and short extension times Fast, easy verification of DNA and RNA sample quality Illumina and SOLiD formats Thermal cycler and qPCR systems for library quantification

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