Agilent

Trusted Answers

SureSelect
Human All Exon V7

Sleek Design, Best-in-Class Coverage, Minimal Sequencing

SureSelect Human All Exon V7

A sleek exome that provides unmatched coverage with minimal sequencing. Designed using GRCh38/hg38* genome assembly, it offers the unique advantages of the updated genome. Machine-learning based bait design enables significant reduction in sequencing cost while providing superb coverage of coding regions from RefSeq, CCDS, GENCODE & UCSC Known Genes.

*Chromosome coordinates available in hg19 genome assembly

Key Benefits

Sleek & innovative bait design to achieve superb coverage with minimal sequencing	Decrease per sample sequencing cost
Designed using the most up-to-date versions of RefSeq, GENCODE, CCDS & UCSC Known Genes	Access comprehensive content including hard-to-capture exons
Optimized library prep solution for every need including low input & FFPE	Experience a seamless workflow

Best-in-class coverage with minimal sequencing

Get the best value for your sequencing dollar

With a sleek design and low sequencing requirements, SureSelect Human All Exon V7 is one of the most cost-effective exome solutions. An innovative bait design maximizes coverage with minimal sequencing.

SureSelect Human All Exon V7 provides excellent coverage of targeted content

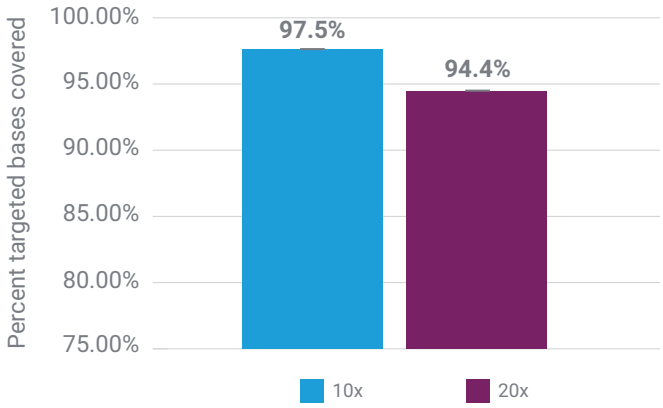


Figure 1. SureSelect Human All Exon V7 was sequenced with 5.3 Gb of sequencing on HiSeq 3000.

Design Size	48.2 Mb
Target Size	35.7 Mb
Sequencing Cost	$160

Table 1. Sequencing cost based on 5.3 Gb of sequencing on HiSeq 3000.

SureSelect Human All Exon V7 provides superior coverage across all databases

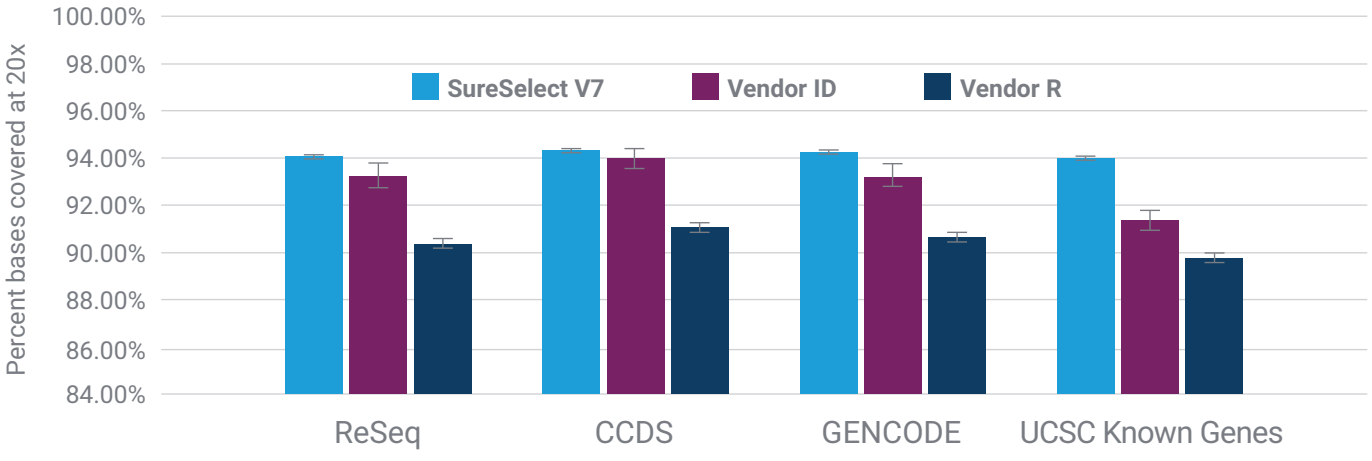


Figure 2. Databases were downloaded from UCSC using the hg38 assembly. Each exome was sequenced with 5.3 Gb of sequencing. Exome sequencing was performed on 8 hapmap samples. Each vendor's protocol was followed for target enrichment. Data shown is average of 8 samples.

The most comprehensive variant detection platform

Access content that matters

SureSelect Human All Exon V7 targets protein coding regions from RefSeq, GENCODE, CCDS, and UCSC Known Genes. Additionally, SureSelect V7 exome targets all pathogenic variants in the genes included in the ACMG guidelines for secondary findings.

SureSelect Human All Exon V7 is the most comprehensive exome

	RefSeq	GENCODE v24	CCDS	UCSC Known Genes
SureSelect Human All Exon V7	**99.3%**	**99.6%**	**99.6%**	**99.6%**
Vendor ID	97.3%	97.1%	98.3%	94.5%
Vendor R	96.9%	97.2%	97.5%	96%
Vendor I	98.8%	99.1%	99.5%	98.3%
Vendor T	96.9%	97.1%	99.9%	93.7%

Table 2. Protein coding regions from each database were downloaded from UCSC Genome Browser.

SureSelect Human All Exon V7 provides superior coverage of positions associated with pathogenic variants

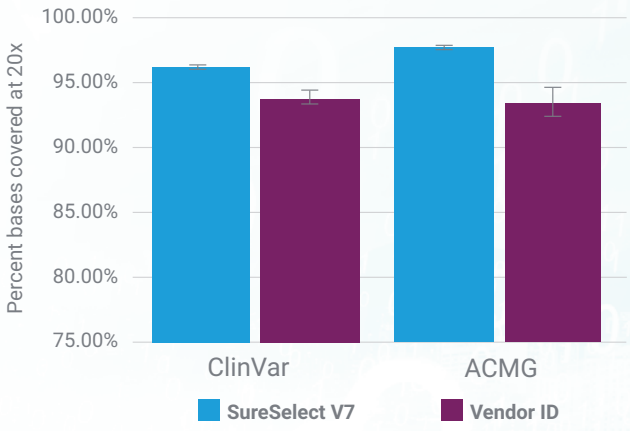


Figure 3. All exomes were sequenced with 5.3 Gb.

SureSelect Human All Exon V7 provides excellent coverage across "hard-to-capture" exons

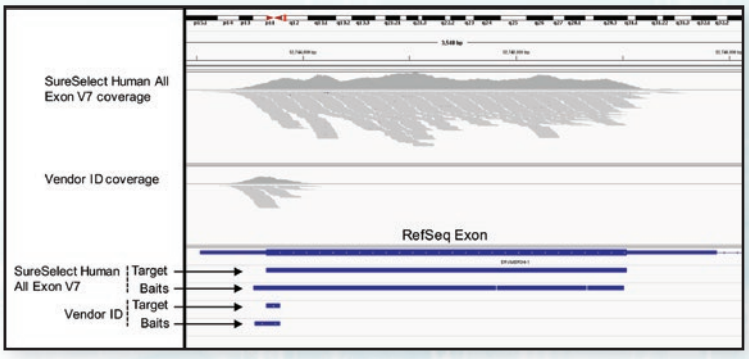


Figure 4. Coding exons containing repeat elements are targeted and efficiently captured by SureSelect Human All Exon V7, thus ensuring that variants in these regions are detected robustly.

Seamless exome workflow solution for every need

Experience a seamless workflow

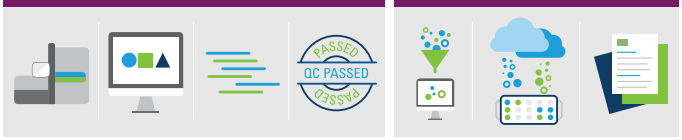
SureSelect Human All Exon V7 is compatible with all SureSelect Library Prep solutions making it one of the most versatile exome solutions. Raw data can be easily uploaded and analyzed using the Agilent Alissa Clinical Informatics Software.

SureSelect Target Enrichment

Library Prep	Target Enrichment Baits

Alissa Clinical Informatics Platform

Alignment & Calling	Interpretation & Reporting



Coming Soon

Library Prep Solutions for All Needs

Library prep solutions for mechanical & enzymatic shearing, pre-capture pooling & low input/FFPE material

Best-in-Class Target Enrichment

Best-in-class exome with the ability to add genome-wide copy number & LOH capabilities

Streamlined Alignment & Calling

Scalable data analysis platform from raw data to variant calls with integrated SNP, indel & CNV calling

Seamless Integration with Variant Assessment

Variant assessment platform to efficiently triage, filter & classify variants

SureSelect^{XT} Low Input Target Enrichment System SureSelect Human All Exon V7

- **Single day exome workflow** from DNA to captured libraries
- 90 min hyb
- Seraseq™ Inherited Cancer DNA Mix v1
- 10 ng Input DNA

Agilent Alissa Clinical Informatics Platform

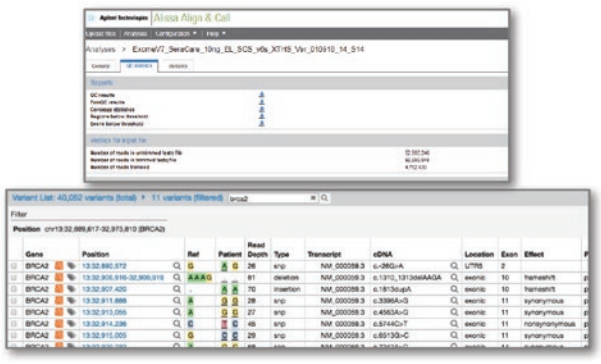


Figure 5. Seraseq™ Inherited Cancer DNA Mix v1 was analyzed using SureSelect Human All Exon V7 and the Alissa Clinical Informatics Software. All expected SNVs and Indels were identified and filtered using the Alissa Clinical Informatics Platform.

Ordering Information

Product Description	16-rxn	96-rxn	96-rxn Auto
SureSelectXT Human All Exon V7	5191-4004	5191-4005	5191-4006
SureSelectXT Human All Exon V7 Plus 1	5191-4010	5191-4011	5191-4012
SureSelectXT Human All Exon V7 Plus 2	5191-4016	5191-4017	5191-4018
SureSelectX2 Human All Exon V7	5191-4007	5191-4008	5191-4009
SureSelectX2 Human All Exon V7 Plus 1	5191-4013	5191-4014	5191-4015
SureSelectX2 Human All Exon V7 Plus 2	5191-4019	5191-4020	5191-4021
OneSeq 300 kb CNV Backbone + Human All Exon V7	5191-4022	5191-4023	5191-4024
OneSeq 1 Mb CNV Backbone + Human All Exon V7	5191-4025	5191-4026	5191-4027

Product Description	Part Number
SureSelectXT HS Reagent Kit, index 1-16 + Human All Exon V7 Target Enrichment Baits, 16 rxn	G9704N
SureSelectXT HS Reagent Kit, index 17-32 + Human All Exon V7 Target Enrichment Baits, 16 rxn	G9705N
SureSelectXT HS Reagent Kit, index 1-32 + Human All Exon V7 Target Enrichment Baits, 96 rxn	G9706N
SureSelectXT Low Input Reagent Kit, index 1-96 + Human All Exon V7 Target Enrichment Baits, 96 rxn	G9707N
SureSelectXT Low Input Reagent Kit, index 97-192 + Human All Exon V7 Target Enrichment Baits, 96 rxn	G9708N
SureSelectXT Low Input Reagent Kit, index 1-96 + Human All Exon V7 Target Enrichment Baits, 96 rxn, auto	G9507N
SureSelectXT Low Input Reagent Kit, index 97-192 + Human All Exon V7 Target Enrichment Baits, 96 rxn, auto	G9508N
SureSelectXT HS Reagent Kit, index 1-16 + Human All Exon V7 Plus 1 Target Enrichment Baits, 16 rxn	G9704P
SureSelectXT HS Reagent Kit, index 17-32 + Human All Exon V7 Plus 1 Target Enrichment Baits, 16 rxn	G9705P
SureSelectXT HS Reagent Kit, index 1-32 + Human All Exon V7 Plus 1 Target Enrichment Baits, 96 rxn	G9706P
SureSelectXT Low Input Reagent Kit, index 1-96 + Human All Exon V7 Plus 1 Target Enrichment Baits, 96 rxn	G9707P
SureSelectXT Low Input Reagent Kit, index 97-192 + Human All Exon V7 Plus 1 Target Enrichment Baits, 96 rxn	G9708P
SureSelectXT Low Input Reagent Kit, index 1-96 + Human All Exon V7 Plus 1 Target Enrichment Baits, 96 rxn, auto	G9507P
SureSelectXT Low Input Reagent Kit, index 97-192 + Human All Exon V7 Plus 1 Target Enrichment Baits, 96 rxn, auto	G9508P
SureSelectXT HS Reagent Kit, index 1-16 + Human All Exon V7 Plus 2 Target Enrichment Baits, 16 rxn	G9704Q
SureSelectXT HS Reagent Kit, index 17-32 + Human All Exon V7 Plus 2 Target Enrichment Baits, 16 rxn	G9705Q
SureSelectXT HS Reagent Kit, index 1-32 + Human All Exon V7 Plus 2 Target Enrichment Baits, 96 rxn	G9706Q
SureSelectXT Low Input Reagent Kit, index 1-96 + Human All Exon V7 Plus 2 Target Enrichment Baits, 96 rxn	G9707Q
SureSelectXT Low Input Reagent Kit, index 97-192 + Human All Exon V7 Plus 2 Target Enrichment Baits, 96 rxn	G9708Q
SureSelectXT Low Input Reagent Kit, index 1-96 + Human All Exon V7 Plus 2 Target Enrichment Baits, 96 rxn, auto	G9507Q
SureSelectXT Low Input Reagent Kit, index 97-192 + Human All Exon V7 Plus 2 Target Enrichment Baits, 96 rxn, auto	G9508Q

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