

BREAK THE NGS DATA ANALYSIS BOTTLENECK FROM RAW DATA TO CATEGORIZATION OF MUTATIONS IN 3 STEPS

The Measure of Confidence

Agilent SureCall Software: NGS Data Analysis Software for Non-Bioinformaticians

Reduce your time-to-results with SureCall

Fast Time-To-Results

- From alignment to categorization of mutations in 3 steps
- Automated categorization based on default or customized parameters
- All variants are richly annotated with information from NCBI Variation Reporter, COSMIC, GWAS catalog, 1000 Genomes, etc.
- Quickly identify somatic mutations in tumor versus normal sample analysis and de novo mutations with trio analysis

Cost-Effective

- Stop outsourcing your bioinformatics
- Runs on Windows and Mac OS without the need for Linux servers

Accurate

- Use best-in-class open source algorithms
- Use an in-house developed variant caller optimized for cancer samples
- Find copy number changes
- Links to external databases

Easy to Install

- Runs on Windows and Mac operating systems
- Download SureCall to your desktop free-of-charge



Figure 1. SureCall is part of Agilent's market leading NGS Target Enrichment solution for clinical research.

Data Analysis in SureCall

SureCall's 3-step workflow addresses the critical need for an easy-to-use analysis tool that incorporates the most widely accepted open source algorithms including BWA-MEM, BWA, TMAP, SamTools, SIFT, and Polyphen. SNPPEP is an in-house developed variant caller optimized to detect low allele frequency variants in cancer samples. Analysis begins with raw reads from Illumina HiSeq/MiSeq or Ion Torrent sequencing of genomic DNA enriched with HaloPlex (Figure 2).

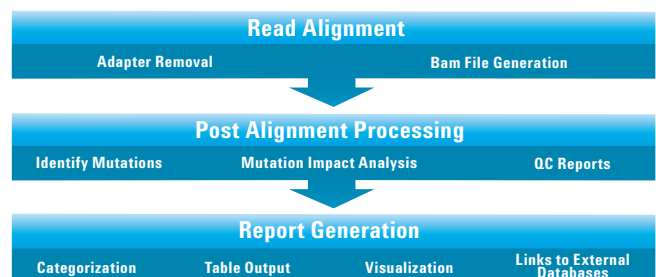


Figure 2. SureCall's end-to-end solution eliminates the need to outsource bioinformatics resources. In addition, SureCall can be downloaded onto a desktop computer an Agilent NGS target enrichment kit.



Agilent Technologies

QC Metrics and Triage View

The triage view in SureCall (Figure 3) allows researchers to suppress the reporting of mutations, change mutation categorization assignments, look up annotation information in external databases, filter mutations, and add notes. You can also compare mutations in a sample with those present in other samples. An audit trail is kept of all changes that are made to the analysis of a sample.

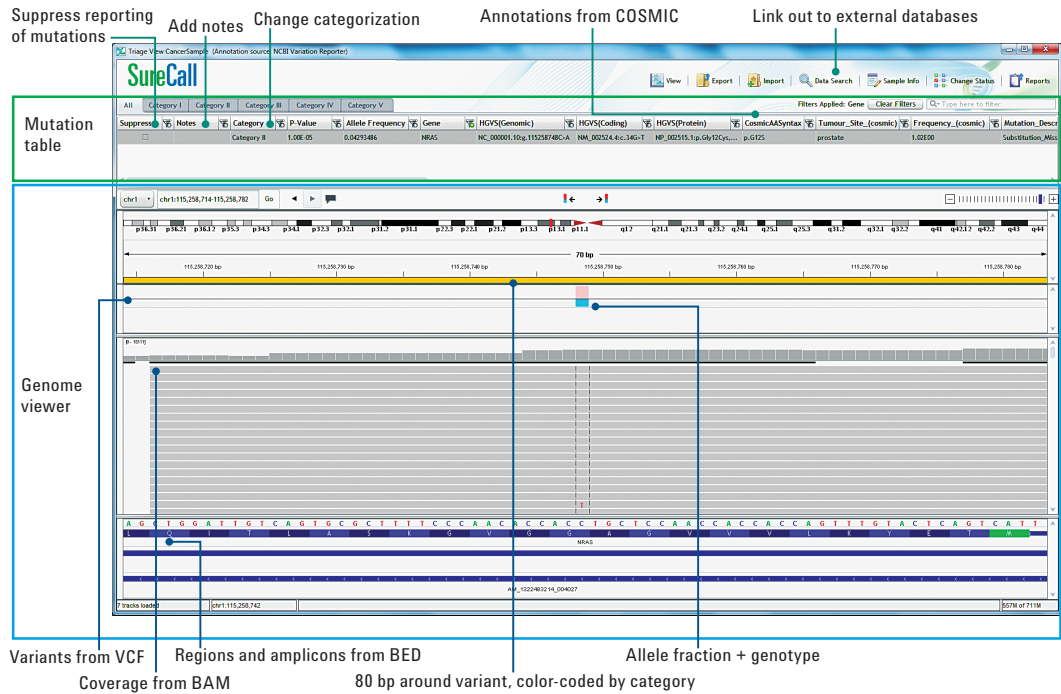


Figure 3. SureCall's Triage View. Detection of a mutation with an allele frequency of 4 % in the NRAS oncogene. The NRAS oncogene is one of the 47 genes targeted by the HaloPlex Cancer Research Panel.

Reporting Options in SureCall

SureCall's flexible, customized reporting functionality offers several options to present information based on your requirements, including a mutation report, QC report and "make your own report" (Figure 4).

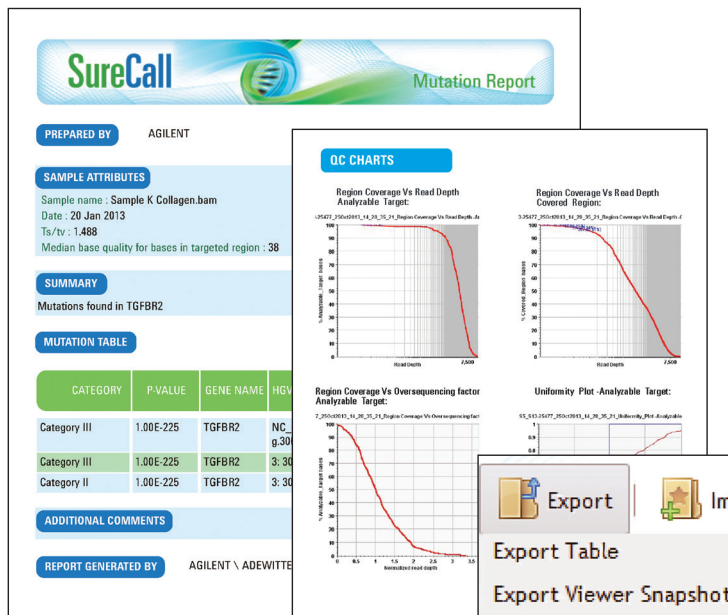


Figure 4. Generate a variety of reports with SureCall's flexible reporting tool.

Learn more about SureCall:
www.agilent.com/genomics/surecall



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 Published in USA, January 21, 2014
 5991-1921EN

