BRCA 1/2 Panel

Germline and Somatic Cancer

KEY FEATURES

1. Targets the whole CDS (+/- 40) and promoter regions of BRCA 1/2 with high specificity	Target regions not only covering the CDS regions but expanded to +40 and -40 of CDS to detect splicing site variants Probes specifically designed for detecting deletion, duplication, and large rearrangement
2. Compatible with a variety of sample types	No compromise on panel performance even with of using DNA from challenging specimen types such as blood and FFPE
3. Market-leading panel performance in uniformity and coverage	Designed to target whole exon regions of BRCA 1, 2 gene with 100% coverage (RefSeq) and validated to yield 100% coverage

SPECIFICATION

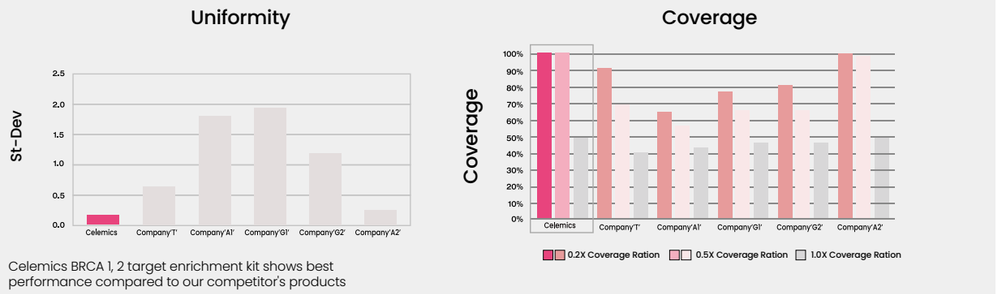
Gene count*	BRCA 1/2 genes
Covered region	Whole CDS (+/- 40bp), UTR, Promoter
Target size	23 kb
Mutation type	SNV, Indel, CNV
Sample type(amount)	Blood (> 50 ng of fragmented DNA), FFPE
Platform	All sequencers from Illumina, Thermo Fisher, MGI, PacBio, and Oxford Nanopore
Sensitivity	> 95% for all variant types at 5% VAF
Specificity	99.9% (SNV), 99.5% (Indel)
Bioinformatics pipeline	Primary, Secondary and Tertiary analysis result (FASTQ to VCF, VCF to Clinical report)

* Gene Add-on Service: Genes can be added or removed by customer demand

Palex
Constant Improvement

PANEL PERFORMANCE

1. Superior Panel Performance Compared to Competitor Product

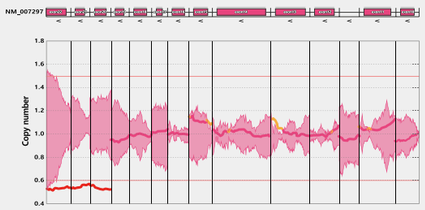


Celemics BRCA 1, 2 target enrichment kit shows best performance compared to our competitor's products

2. SNV, CNV Analysis

BRCA1, S1556G & S1389S / BRCA2, N372H & L1521L / BRCA1 CNV plot

Gene	Mutation Type	Amino AcidC hange	Sequencing			Variant Allele Frequency
			Total	Ref.	Alt.	
BRCA1	Non-SYN	p.S1556G	634	315	301	48.71%
BRCA1	SYN	p.S1389S	876	501	370	42.48%
BRCA2	Non-SYN	p.N372H	396	213	181	45.94%
BRCA2	SYN	p.L1521L	289	0	281	99.29%



PACKAGE COMPOSITION

Package name	Compositions		
Target Enrichment	Target capture Probe	-	
Standard	Target Enrichment reagents	Library prep Kit	-
All-In-One			Beads / Polymerase

Package option	Options	
Pooling method	Single Reaction	Pre-capture Pooling
Library Preparation kits	Standard Kit	EP-kit
Hybridization Enhancer	Included	Not included