

# Plasma-SeqSensei™ BC RUO Kit



Master the sensitivity  
in ctDNA detection

Plasma-SeqSensei™\* (PSS) BC RUO kits offer next-generation sequencing technology-based assays that enable highly sensitive and quantitative detection of mutations in circulating tumour DNA (ctDNA) from plasma and deliver results within two days as easy-to-read reports using Plasma-SeqSensei™ Software.

Key gene mutations covered include AKT1, ERBB2, ESR1, KRAS, PIK3CA and TP53 to detect predictive markers, resistance mutations and frequently occurring clinically relevant genetic alterations in breast cancer research settings.

## Unique benefits for clinical researchers



### High sensitivity at low frequencies

PSS workflow reduces sequencing error rate up to 100-fold employing unique molecular identifiers (UID), enabling detection of 0.06% and higher mutant allele frequencies (MAF) with 95% certainty in a background of 10,000 wildtype copies.

→ Confident mutant variant reporting



### Absolute mutant quantification

Internal quantifier Quantispike enables absolute ctDNA quantification down to a limit of detection (LOD) of six mutant molecules (MM) independent of actual sample DNA input.

→ Consistent quantification independent of cfDNA input.

## Unique benefits for clinical research laboratory



### Short and standardised workflow

Standardised workflow from cfDNA samples to results in two days, including sequencing time.



### Fast and convenient data analysis

Locally installed software automates data analysis and provides an easy-to-read mutation report, requiring only minimal bioinformatic knowledge.

## Key facts

- ✓ Highly sensitive down to 0.06% MAF
- ✓ Able to detect six mutant molecules with 95% confidence
- ✓ Fast turnaround time (two days)
- ✓ Easy-to-read report



## Target regions for PSS BC RUO Kit

Gene ID#	Transcript ID#	CDS start	CDS end
AKT1	ENST00000554581	47	69
ERBB2	ENST00000269571	907	947
ERBB2	ENST00000269571	2,308	2,360
ERBB2	ENST00000269571	2,258	2,307
ESR1	ENST00000440973	1,108	1,143
ESR1	ENST00000440973	1,378	1,420
ESR1	ENST00000440973	1,583	1,614
KRAS	ENST00000256078	8	43
PIK3CA	ENST00000263967	254	278
PIK3CA	ENST00000263967	329	352
PIK3CA	ENST00000263967	353	367
PIK3CA	ENST00000263967	1,033	1,058
PIK3CA	ENST00000263967	1,085	1,115
PIK3CA	ENST00000263967	1,252	1,264
PIK3CA	ENST00000263967	1,348	1,387
PIK3CA	ENST00000263967	1611	1659
PIK3CA	ENST00000263967	2,138	2,184
PIK3CA	ENST00000263967	3118	3169
TP53	ENST00000269305	144	232
TP53	ENST00000269305	293	375
TP53	ENST00000269305	376	423
TP53	ENST00000269305	451	537
TP53	ENST00000269305	574	659
TP53	ENST00000269305	695	782
TP53	ENST00000269305	783	856
TP53	ENST00000269305	888	919
TP53	ENST00000269305	920	993
TP53	ENST00000269305	994	1,080

## Product specifications

Feature	Description
Starting sample	Whole blood and plasma
Sample capacity	2–16 samples per kit
QC function	Positive control and no template control (NTC) applied to every run
Input DNA required	4.3–86 ng / 116 µL
Number of amplicons	28
Sensitivity	0.06% allele frequency with 95% certainty in 10,000 wildtype copies
Cut-off	6 mutant molecules
Compatible sequencing instruments	Illumina MiSeq™ Illumina NextSeq 500/550™

\* Plasma-SeqSense™ BC RUO Kit is for Research Use Only. Not for use in diagnostic procedures.

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