

# Plasma-SeqSensei™ Melanoma RUO Kit



Plasma-SeqSensei™\* (PSS) Melanoma 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 BRAF and NRAS to detect predictive markers, resistance mutations and frequently occurring clinically relevant genetic alterations in melanoma 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 0.07% 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 seven 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 0.07% MAF
- ✓ Able to detect six mutant molecules with 95% confidence
- ✓ Fast turnaround time (two days)
- ✓ Easy-to-read report



## Target regions for PSS Melanoma RUO Kit

Gene ID#	Transcript ID#	CDS start	CDS end
<b>BRAF</b>	ENST00000288602	1,383	1,431
<b>BRAF</b>	ENST00000288602	1,742	1,813
<b>NRAS</b>	ENST00000369535	162	210
<b>NRAS</b>	ENST00000369535	420	449
<b>NRAS</b>	ENST00000369535	1	52
<b>NRAS</b>	ENST00000369535	341	364

## Product specifications

Feature	Description
<b>Starting sample</b>	Whole blood and plasma
<b>Sample capacity</b>	2–16 samples per kit
<b>QC function</b>	Positive control and no template control (NTC) applied to every run
<b>Input DNA required</b>	5.7–95 ng / 116 µL
<b>Number of amplicons</b>	6
<b>Sensitivity</b>	0.07% allele frequency with 95% certainty in 10,000 wildtype copies
<b>Cut-off</b>	7 mutant molecules
<b>Compatible sequencing instruments</b>	Illumina MiSeq™ Illumina NextSeq 500/550™

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

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