

# Advanta Expanded to Detect Mutations Associated with Variants of Concern for Research Use

## Advanta SARS-CoV-2 Mutation Assay Panel

SARS-CoV-2, like all RNA viruses, evolves and mutates. Since its discovery, the viral sequence for the novel coronavirus has accumulated a staggering number of mutations. Some of them, due to their increased infectivity, transmissibility and association with COVID-19 severity, have allowed certain viral strains to become dominant and pose an ongoing threat to human health, treatment options, vaccine efficacy and the performance of diagnostic tests. If the virus can evolve, the assays designed to detect it must evolve as well.

The RT-PCR based Advanta™ SARS-CoV-2 Mutation Assay Panel delivers concurrent detection of the SARS-CoV-2 N1 and N2 genes plus six mutations associated with Variants of Concern identified by the CDC and WHO. The Advanta Assay uses probe pairs that independently target the mutation and wild type of each allele, yielding high specificity for each mutation and eliminating false calls.

Mutation (where first reported)	B.1.1.7 (UK)	B.1.351 (S. Africa)	P.1 (Brazil)	B.1.427	
				B.1.429 (US-CA)	B.1.526 (US-NY)
K417N		✓			
K417T			✓		
L452R				✓	
E484K		✓	✓		✓
N501Y	✓	✓	✓		
Δ69/70	✓				

## Product Highlights

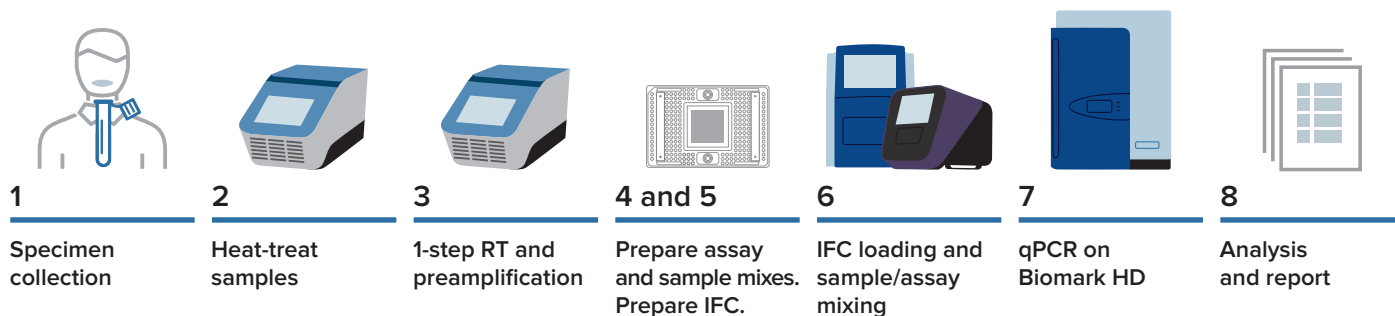
**Reflex-free workflow—** Concurrently detects SARS-CoV-2 and key mutations from the same input sample using a single integrated fluidic circuit (IFC), saving reagents, samples and time

**Saliva-based and extraction-free—** Performs equivalently to comparator nasal tests<sup>1</sup> using convenient and noninvasive sample collection without the need for commercial extraction kits

**More data—** Supports detection and surveillance of key mutations from a single workflow that supports up to 6,000 samples per day

**Flexible—** Emerging mutations can be added in the future without worry, unlike with other multiplex RT-PCR assays, due to the open architecture of the IFC.

As an expansion of the Research Use Only on-market Advanta pathogen detection portfolio, this new assay continues to leverage Fluidigm proprietary microfluidics technology along with an IFC controller (Juno™ or IFC Controller RX) and the Biomark™ HD platform to enable scalable testing of saliva and extracted RNA samples for your research needs without impacting the throughput, hands-on time or turnaround time of the original Advanta RT-PCR Kit. By using the Advanta Assay, users get more data without using more reagents, incurring more labor or sacrificing performance. Finally, the open design of the IFC architecture provides flexibility by allowing users to update assay content over time as new mutations appear or as other existing mutations become more prevalent.



Panel Layout		
N1	N2	RNase P
N1	N2	RNase P
N1	N2	RNase P
N1	N2	RNase P
L452R mutant	K417N mutant	N501Y mutant
L452R wild type	K417N wild type	N501Y wild type
Δ69/70 mutant	K417T mutant	E484K mutant
Δ69/70 wild type	K417T wild type	E484K wild type

## Panel Ordering Information

Product Name		Part Number
Assay kit	Advanta™ SARS-CoV-2 Mutation Assay Panel	102-1340
Additional Products Needed		Part Number
Instruments	Biomark HD	BMKHD-BMKHD
	Juno	101-6455
IFC and kit bundles	Advanta Preamp & IFC Reagent Kit—192.24	102-1341

Stay up to date with our evolving mutation detection options at: [fluidigm.com](https://fluidigm.com)

1. Hanson et al, *J Clin Microbiol*, Nov 2020

**For Research Use Only. Not for use in diagnostic procedures.**

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