



SeraCare AccuPlex™ SARS-CoV-2 Variant Panel 1

AccuPlex™ SARS-CoV-2 Variant Panel 1 contains the full SARS-CoV-2 genomic RNA with a focus on S-gene mutations (Table 1) in three prominent variants of concern (VOC): UK variant B.1.1.7, South Africa variant B.1.351, and Brazil variant P.1. The kit has one vial for each variant as well as a fourth wild type (reference sequence NC_045512) control vial. An RNase P negative control vial is also included.

Product Description	Material Number	Strain	Pack size	Concentration
AccuPlex™ SARS-CoV-2 Variant Panel 1	0505-0241	UK B.1.1.7 S. Africa B.1.351 Brazil P.1 Wuhan Wild Type RNase P negative	Positive 4 x 1.5 mL	Positive 15,000 cp/mL
			Negative 1 x 1.5 mL	Negative 5000 cp/mL

Not for In vitro Diagnostic Use. Research Use Only.

SeraCare's SARS-CoV-2 Variant Solution:

- Performance confirmation of existing SARS-CoV-2 molecular assays with different variants
- Reference materials for SARS-CoV-2 variant genotyping assays
- Reference materials for SARS-CoV-2 NGS assays
- Non-Infectious and replication deficient, ensures safe handling in contrast to viral samples
- Fully extractable with a real viral protein coat; superior to "naked" transcribed RNA
- 2 year stability at 2 - 8°C



TRUSTED SUPPLIER TO DIAGNOSTIC MANUFACTURERS AND CLINICAL LABS FOR OVER 30 YEARS.

HIGH-QUALITY CONTROL PRODUCTS, RAW BIOLOGICAL MATERIALS, AND IMMUNOASSAY REAGENTS.

INNOVATIVE TOOLS AND TECHNOLOGIES TO PROVIDE ASSURANCE IN DIAGNOSTIC ASSAY PERFORMANCE AND TEST RESULTS.

Table 1: Mutations and variant strains contained in the AccuPlex SARS-CoV-2 Variant Panel 1

Amino Acid Change	Nucleotide Change	B.1.1.7 UK variant	B.1.351 S. Africa variant	P.1 Japan/Brazil variant
L18F	C21614T			X
T20N	C21621A			X
P26S	C21638T			X
HV 69-70 deletion	21765-21770 deletion	X		
D80A	A21801C		X	
D138Y	G21974T			X
Y144 deletion	21991-21993 deletion	X		
R190S	G22132T			X
D215G	A22206G		X	
242_244 DelLAL	22286-22294 Del		X	
K417N	G22813T		X	
K417T	A22812C			X
E484K	G23012A		X	X
N501Y	A23063T	X	X	X
A570D	C23271A	X		
D614G	A23403G	X	X	X
H655Y	C23525T			X
P681H	C23604A	X		
A701V	C23664T		X	
T716I	C23709T	X		
S982A	T24506G	X		
T1027I	C24642T			X
D1118H	G24914C	X		
V1176F	G25088T			X

SeraCare's AccuPlex recombinant material serves as a true full process molecular control for your diagnostic assays. Compatible with multiplexed RT-PCR and NGS-based assays, AccuPlex custom recombinant materials are constructed with a replication-deficient mammalian virus, producing a safe, non-infectious material (Figure 1). With a protein coat and lipid bilayer, these mammalian virus-based reference materials resemble the complexity of virus targets found in true patient samples.

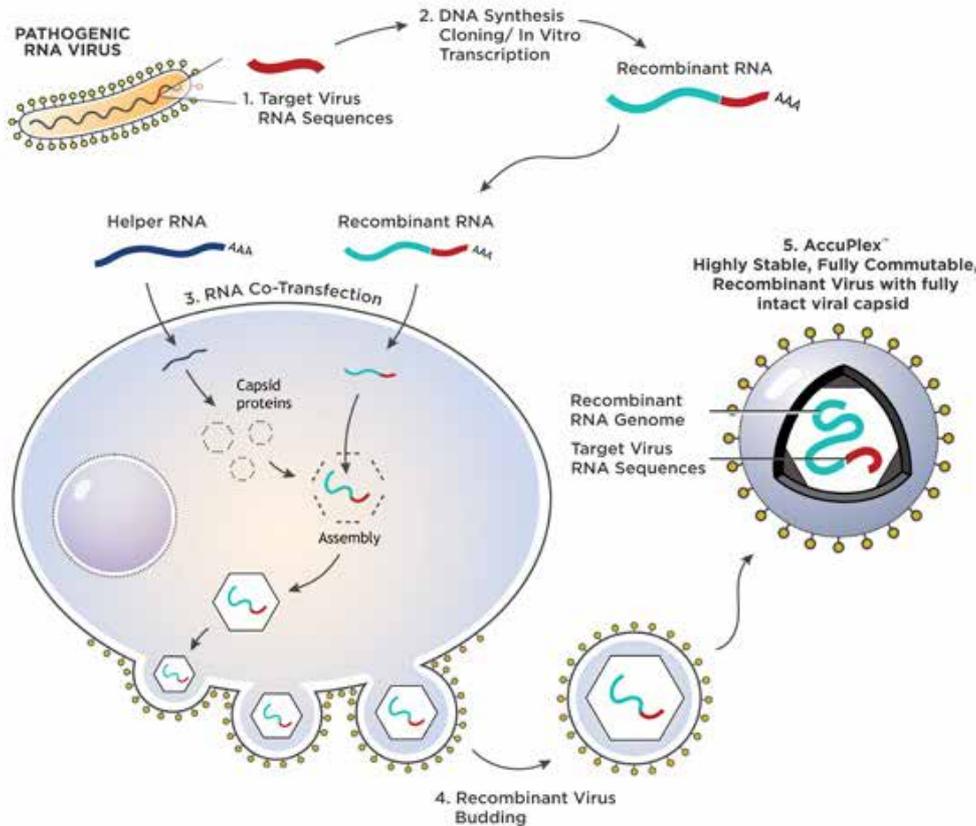


FIGURE 1:

1. RNA sequence from the pathogenic virus of interest is chosen.
2. DNA synthesis and cloning occur to produce the recombinant RNA.
3. Recombinant RNA and helper RNA are co-transfected into the mammalian cells, allowing the encapsulation of recombinant RNA.
4. Exocytosis of the mature enveloped non-infectious and replication deficient RNA virus containing the assay target RNA sequence of interest.

MOST 'PATIENT SAMPLE-LIKE' MATERIAL EVALUATES ENTIRE WORKFLOW

Unlike RNA-spiked buffer, or technologies that package viral RNA into a bacteriophage, the AccuPlex recombinant closely resembles the wild-type mammalian pathogenic virus. This enables the release of the viral genome at a similar rate to the wild-type virus during the nucleic acid sample preparation process. AccuPlex recombinant material mimics a real patient sample in your workflow, serving as a full-process control for your assay.

ACCUPLEX SOLVES ASSAY DEVELOPMENT CHALLENGES

If you're developing diagnostics for emerging viral diseases and have the challenge of including safe, non-infectious controls in your test kit, partner with SeraCare's talented R&D team to produce your custom AccuPlex recombinant virus material (DNA or RNA-based). Utilising your sequences of interest and product specifications, SeraCare will develop a custom solution which meets your unique requirements.

ORDERING INFORMATION:

To place an order, or learn more about the SeraCare SARS-CoV-2 quality control solutions we have to offer, please contact TECHNOPATH directly on the below details and your local representative will contact you to discuss further.

ORDERING INFORMATION

TECHNOPATH | Fort Henry Business Park | Ballina | Co. Tipperary | V94W967 | Ireland
 Tel: +353 (0)61 335844 | Fax: +353 (0)61 203034
 Email: orders@techno-path.com | www.techno-path.com



T E C H N O P A T H