

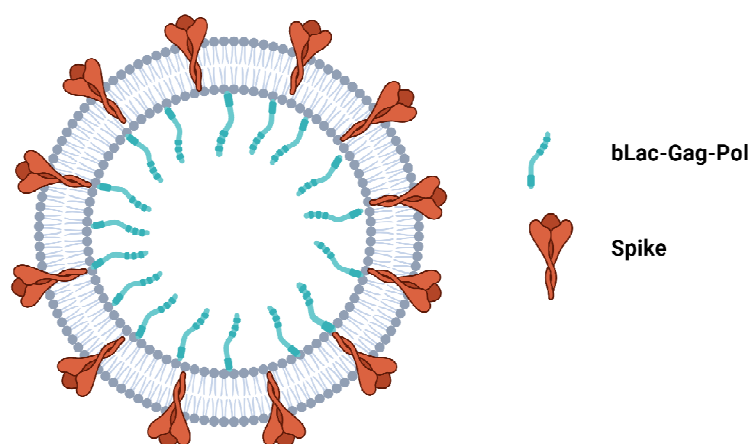
## Data Sheet

## Codex's Next Generation of SARS-CoV-2-SA Variant Pseudovirus Particles (SARS-CoV-2-SA-PP-βLac)

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### Introduction

We have developed the next generation of SARS-CoV-2-pseudovirus particles by introducing a fusion protein of β-Lactamase-Gag-pol as a reporter (SARS-CoV-2-PP-βLac). Upon the pseudovirus particles infection of the cells, the reporter enters into the mammalian cells. By measuring the β-Lactamase activity in the cells, the infectivity of the PP can be determined.



### Features

- **Rapid:** It takes 4-6 hours after the infection to obtain the robust signal
- **Robust:** Excellent signal to noise (basal) ratio.
- **Easy to use:** Amenable to HTS format (96-well, 384-well and 1536-well format).
- **Specific:** It only measures the PP entry

### Applications

- Working perfectly for βLac Pseudovirus to get robust signal, screening potential inhibitor to block SARS-CoV-2 SA variant entry.

### Product Information

Catalog Number:

Components

CB-97100-154b-1ml  
CB-97100-154b-5ml

1ml SARS-CoV-2-SA Variant Pseudovirus Particles-β-Lac  
5ml SARS-CoV-2-SA Variant Pseudovirus Particles-β-Lac

### Storage

Store at -80°C

## ASSAY PROTOCOL

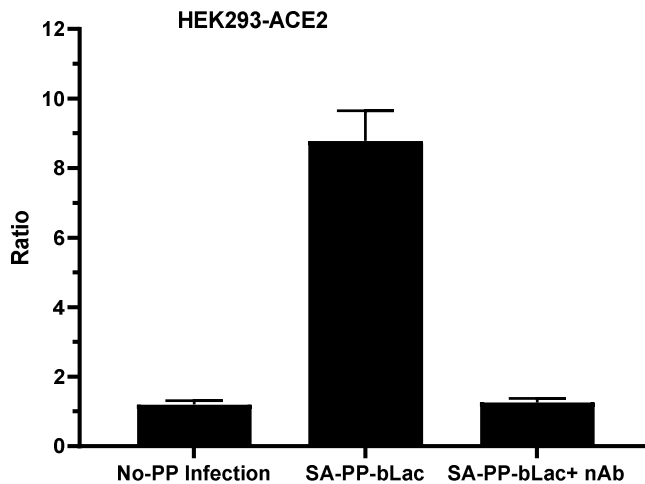
### Cell Infection:

1. HEK293-ACE2 cells (CB-97100-220) to be infected and seed ~20K cells per well into 96-well plates (50  $\mu$ l per well) DMEM with 10% HyClone™ FetalClone™ II Serum (no antibiotics) or 5K cells per well into 384-well plates (15  $\mu$ l per well)
2. Culture cells overnight to make sure the cells stably adhere to the plates.
3. On the 2<sup>nd</sup> day, remove the media, add 50  $\mu$ l SARS-CoV-2-SA-PP- $\beta$ Lac into each well (12.5  $\mu$ l for 384-well plate). Spin at 700 rpm for 15 min at 4°C
4. Add 50  $\mu$ l DMEM with 10% FC into each well (12.5  $\mu$ l for 384-well plates).
5. Incubate for 3-4 hr at 37 °C

### Measurement of Luciferase Activity in Infected cells

1. Add 50  $\mu$ l or 12.5  $\mu$ l of 3X  $\beta$ Lac substrate (ThermoFisher K1029) into each well of 96-well or 384-well plate respectively.
2. Incubate at room temperature for 1-4 hr in the dark
3. Record the data on a FlexStation or other Fluorescent plate readers (Ex: 410 nm, Em: 450 nm and 520 nm)

## DATA



**Figure 1. Pseudoviral Particle (PP) Infection Assays**

SARS-CoV-2- $\beta$ Lac-SA variant pseudoviral particles on HEK293-ACE2 cells in 384-well format.

**Legends:** **SA-PP-bLac:** SARS-CoV-2- $\beta$ Lac SA Variant MLV Pseudovirus Particles; **nAb:** Neutralizing Antibody against SARS-CoV-2