



Pseudotyped GFP rSARS-CoV-2 Spike (South African variant B.1.351, 20C/501Y.V2) (COVG-501YV2)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview

SARS-CoV-2 Pseudovirus (South African variant B.1.351, 20C/501Y.V2) are used to test the ability of serum, antibodies, and drugs to neutralize the infectivity of SARS-CoV-2 spike protein. Pseudovirus display antigenically correct spike protein pseudotyped on replication-incompetent virus particles that contain a heterologous lentiviral (HIV) core. Pseudovirus are capable of a single round of infection and carry a genome that expresses GFP optical reporter gene upon infection. Pseudovirus are produced in HEK293T cells using three separate plasmids, encoding the spike protein (L18F, D80A, D215G, L242H, R246I, K417N, N501Y, E484K, D614G, A701V), a lentiviral gag polyprotein, and a reporter gene. Pseudovirus are created using a second-generation lentiviral system with components that are highly unlikely to recombine to produce a fully infectious virus (requiring 3 separate recombination events to do so). However, lentiviruses are capable of genomic integration and Pseudovirus are derived from biological materials so should be handled with caution within a BSL2 or enhanced BSL2 laboratory environment.

Expression System	HEK293T
Species	SARS-CoV-2 (South African variant B.1.351, 20C/501Y.V2)
Applications	We recommended to use 10-30 uL pseudotyped virus per 1E+04 293T cells for in vitro assay. The titer will vary with each lot; the exact value is provided with each shipment. Due to differences in cell status, the best infection conditions and MOI should be determined by the end user. The virus can be diluted with cell culture medium if needed.
Size	1 ml
Buffer	20% FBS/DMEM
Storage	Store at -80°C. Multiple freeze/thaw cycles not recommended.

When using the virus, transfer the virus from the -80 ° C refrigerator and melt it in an ice bath.

Ship

Frozen on dry ice

Warnings

Biosafety Level: BSL-2

It is the responsibility of the principal investigator to seek Institutional Biosafety Safety Committee approval for recombinant DNA, transgenic animal or infectious agent use within their laboratory spaces and maintain an Institutional Biosafety Safety Committee approval during the time period these materials are used.

BACKGROUND

Keywords

SARS-CoV-2 pseudovirus; SARS-CoV-2 pseudovirion; SARS-CoV-2 lentiviral pseudovirus; SARS-CoV-2 reporter virus particles; SARS-CoV-2 Spike Pseudotyped Virus; SARS-CoV-2 Pseudotyped Lentivirus
