



Pseudotyped Luciferase rSARS-CoV-2 Spike, Omicron Variant (B.1.1.529) (COVL-B11529)

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

PRODUCT INFORMATION

Product Overview

SARS-CoV-2 Pseudovirus (Omicron Variant, B.1.1.529) 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 luciferase optical reporter gene upon infection. Pseudovirus are produced in HEK293T cells using three separate plasmids, encoding the spike protein (A67V, Δ69-70, T95I, G142D/Δ143-145, Δ211/L212I, ins214EPE, G339D, S371L, S373P, S375F, K417N, N440K, G446S, S477N, T478K, E484A, Q493R, G496S, Q498R, N501Y, Y505H, T547K, D614G, H655Y, N679K, P681H, N764K, D796Y, N856K, Q954H, N969K, L981F), 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.

Applications

We recommended to use 10-30 uL pseudotyped virus per 1E+04 293T cells for in vitro assay. 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

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