



Pseudotyped VSV-SARS-CoV-2 S-ΔG-Luciferase (South African variant Δ3 B.1.351, 20H/501Y.V2, Beta) (COV-PSV18)

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

PRODUCT INFORMATION

Product Overview

Pseudotyped VSV-SARS-CoV-2 S-ΔG-Luciferase (South African variant Δ3 B.1.351, 20H/501Y.V2, Beta) encodes the antigenomic-sense (or positive-sense) RNA of a replication-restricted recombinant vesicular stomatitis virus (rVSV) in which the glycoprotein (G) gene has been replaced with the firefly luciferase (Fluc) reporter gene and SARS-CoV-2 spike protein (L18F, D80A, D215G, ΔL242/A243/L244, R246I, K417N, N501Y, E484K, D614G, A701V) is incorporated as the membrane protein on the surface of the VSV pseudotyped virus. Because the infectivity of Pseudotyped VSV-SARS-CoV-2 S-ΔG-Luciferase is restricted to a single round of replication, the pseudotypes can be handled using BSL-2 containment practices. The pseudotype VSV particles encode luciferase together with the VSV nucleocapsid (N), phosphoprotein (P), glycoprotein (G), and large polymerase subunit (L) in their pVSV-ΔG vector. When the VSV pseudovirus infect the target cells, luciferase expression is proportional to the number of cells that were infected

Nature

Virus

Applications

We recommended to use 2-5 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

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.
