



TECH DATA SHEET

REPORTER VIRUS PARTICLES

DESCRIPTION

Product	RVP-920G, Hu-CoV 229E Reporter Virus Particles (RVPs)
Lot	CG-470A
Strain	229E (Gen Bank: DQ243963.1)
Reporter	GFP
Size	1.0 mL/vial
Packaging	20% FBS/DMEM
Viral Titer	5.51 x 10 ⁶ TU/mL
Recommended Input	5µL per well (96-well plate) for ~20% infectivity in a flow assay*
Mycoplasma Test	Negative
Production Date	February 2023

SAFETY & HANDLING

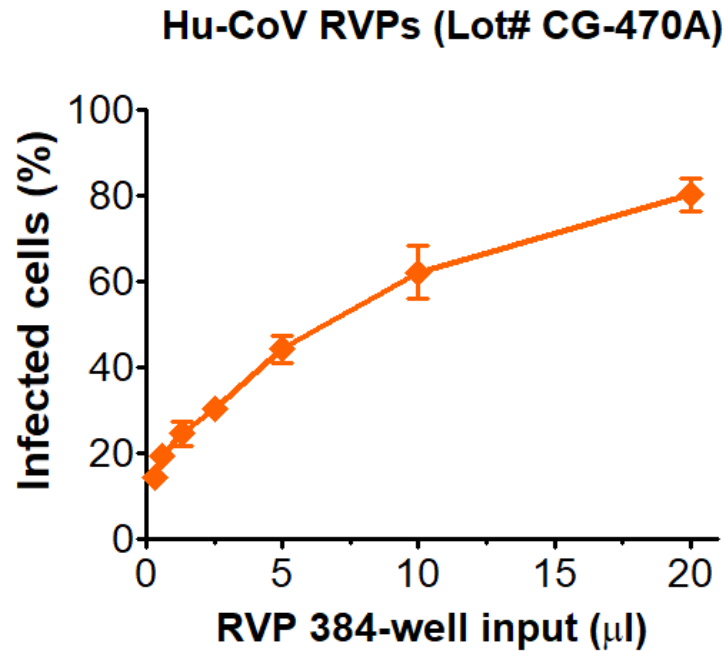
Shipping	Shipped on dry ice
Stability and Storage	Store at ≤ -80°C upon receipt

* Determined in the 786-O cell line

Hu-CoV RVPs are used to test the ability of serum, antibodies, and drugs to neutralize the infectivity of a given Spike protein. RVPs display antigenically correct spike protein pseudotyped on replication-incompetent virus particles that contain a heterologous lentiviral (HIV) core. RVPs are capable of a single round of infection and carry a genome that expresses either a GFP or luciferase optical reporter gene upon infection. RVPs are produced in HEK-293T cells using three separate plasmids, encoding the spike protein, a lentiviral gag polyprotein, and a reporter gene. RVPs 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 RVPs are derived from biological materials so should be handled with caution within a BSL2 or enhanced BSL2 laboratory environment. RVPs are not to be used in humans or in animals raised for food.

Thaw vials in a 37°C water bath for 3 minutes and place on ice until ready to use. RVPs will appear as a translucent, pink solution. Gently mix prior to use and pulse vial for 3 seconds at high speed in a tabletop microfuge to recover all volume from the vial. Vortexing of RVPs should be avoided. Re-freezing of RVPs is not recommended.

INFECTIVITY DATA



Infectivity determined in 786-O cells (ATCC Cat# CRL-1932). Infectivity data represents the average of three independent vials, each tested in quadruplicate.

GFP positive cells were detected with an Intellicyt iQue flow cytometer using the BL-1 channel (Ex. 488 nm, Em. 530).