



TECH DATA SHEET

REPORTER VIRUS PARTICLES

DESCRIPTION

Product	RVP-901G, MERS Reporter Virus Particles (RVPs)
Lot	MG-127A
Strain	HCoV-EMC
Reporter	GFP
Size	1.0 ml/vial
Packaging	20% FBS/DMEM
Recommended Input	20uL per well (96-well plate); 5uL per well (384-well plate) using Huh7
Mycoplasma Test	Negative
Expiration Date	October 2024

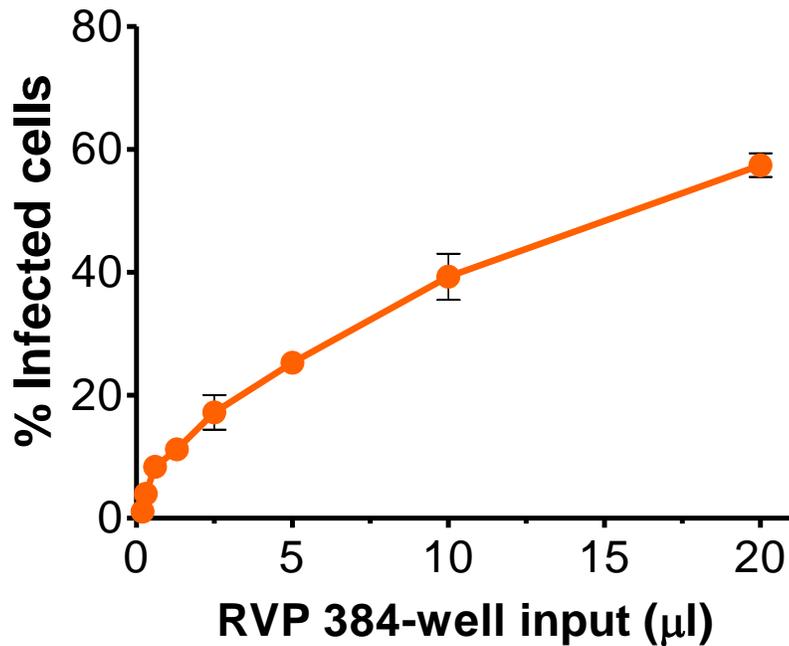
SAFETY & HANDLING

Shipping	Shipped on dry ice
Stability and Storage	Store at $\leq -80^{\circ}\text{C}$

MERS RVPs are used to test the ability of serum, antibodies, and drugs to neutralize the infectivity of MERS 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 tubes 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. Excessive vortexing of RVPs should be avoided. Re-freezing of RVPs is not recommended.

INFECTIVITY DATA

MERS RVP (Lot# MG-127A)

Infectivity determined in Huh7 cells. GFP positive cells were detected with an Intellicyt iQue flow cytometer using the BL-1 channel (Ex. 488 nm, Em. 530).