



TECH DATA SHEET

REPORTER VIRUS PARTICLES

DESCRIPTION

Product	RVP-1211G, Influenza A Reporter Virus Particles (RVPs)
Lot	IAG-473A (R&D)
Subtype	H1N1
Strain	Wisconsin/588/19
Reporter	GFP
Size	1.0 mL/vial
Packaging	10% FBS/DMEM
Viral Titer	9.99×10^5 TU/ml
Recommended Input	26 μ L per well (96-well plate) for ~20% infectivity in a flow assay*
Mycoplasma Test	Negative
Expiration Date	February 2027

SAFETY & HANDLING

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

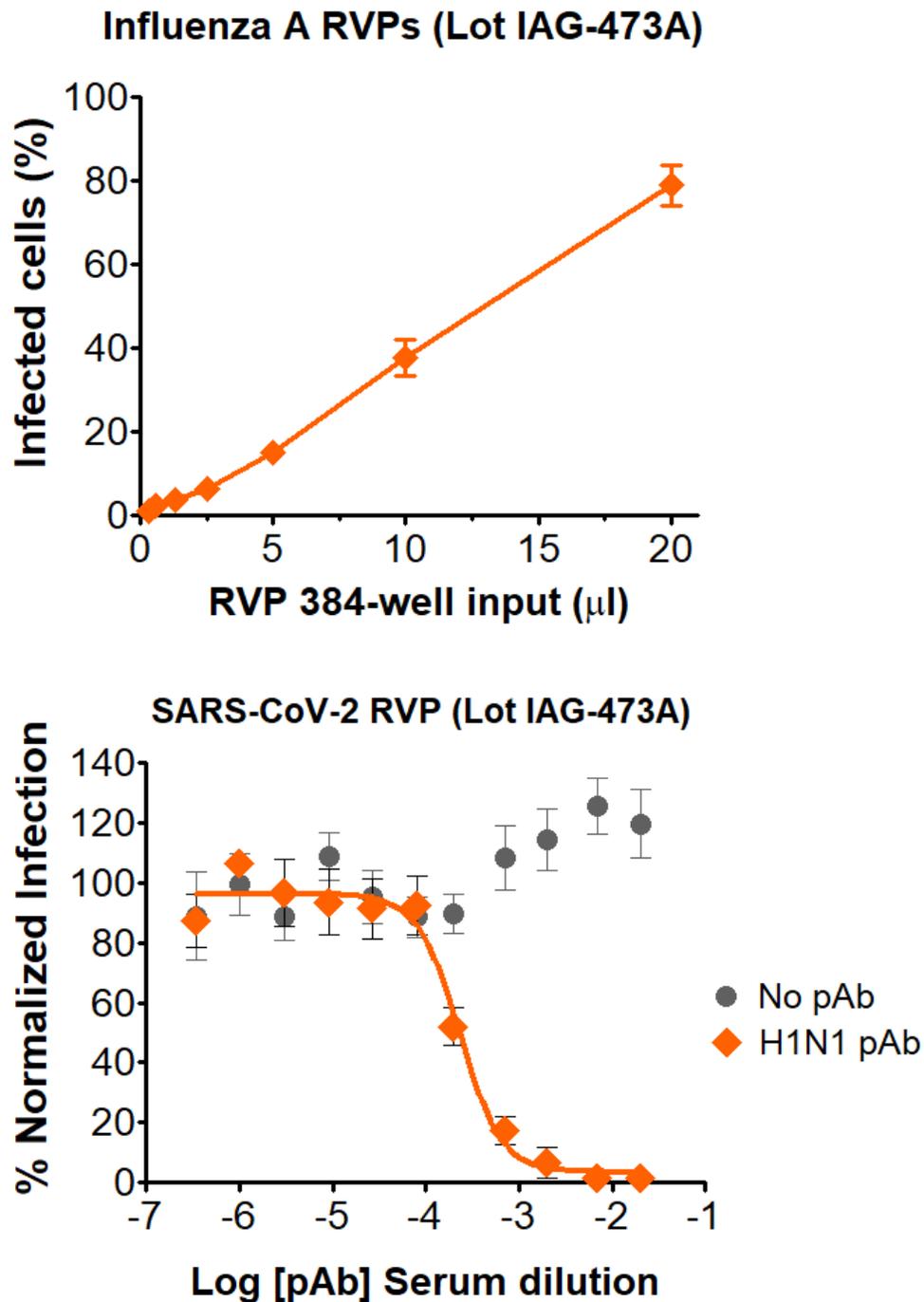
* Determined in the MDCK-SIAT1 cell line

Influenza A RVPs are used to test the ability of serum, antibodies, and drugs to neutralize infectivity. RVPs display antigenically correct HA/NA 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 four separate plasmids, encoding the HA protein, the NA 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 2 minutes and place on ice until ready to use. RVPs will appear as a translucent, pink solution. Gently mix prior to use and pulse tube for 3 seconds at high speed in a tabletop microfuge to recover all volume from the tube. Vortexing of RVPs should be avoided. Re-freezing of RVPs is not recommended.

INFECTIVITY AND NEUTRALIZATION DATA



Infectivity and neutralization determined in MDCK-SIAT1 cells.

Neutralization utilized 5 µl of Influenza A H1N1 RVPs in a 384-well plate. GFP positive cells were detected with an Intellicyt iQue flow cytometer using the BL-1 channel (Ex. 488 nm, Em. 530).