TECH DATA SHEET

REPORTER VIRUS PARTICLES

DESCRIPTION

Product	RVP-1227G, Influenza A Reporter Virus Particles (RVPs)
Lot	IAG-1050.16A
Subtype	H5N5
Strain	Washington/2148/2025
Reporter	GFP
Size	1.0 mL/vial
Packaging	20% FBS/DMEM
Viral Titer	1.01 x 10^6 TU/ml†
Recommended Input	10µL per well (96-well plate) for ≥ 20% infectivity in a flow assay*
Mycoplasma Test	Negative
Expiration Date	March 2028

SAFETY & HANDLING

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

* Determined in the HEK-293T 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 3 minutes and place on ice until ready to use. RVPs will appear as a translucent 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.

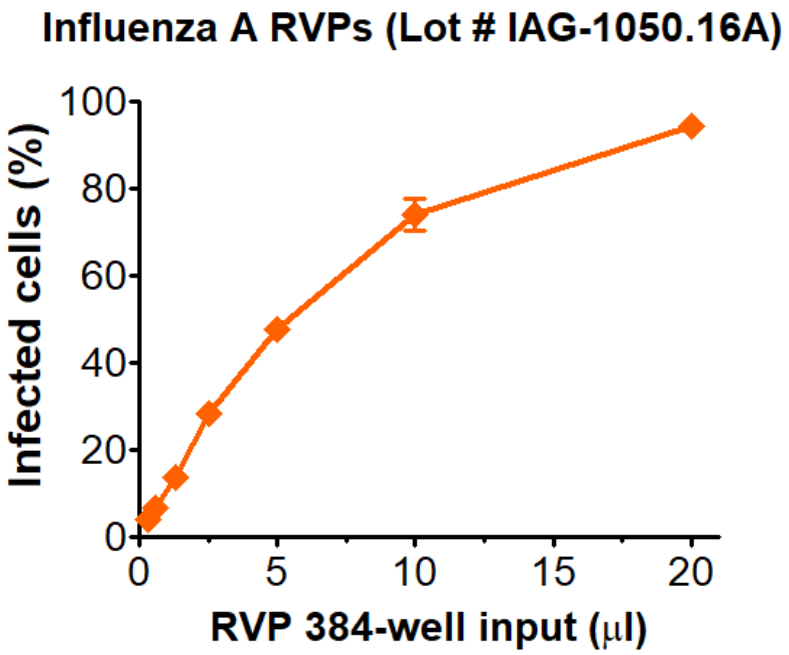
† Titer is calculated using the estimated number of cells during the time of infection, using the following equation:

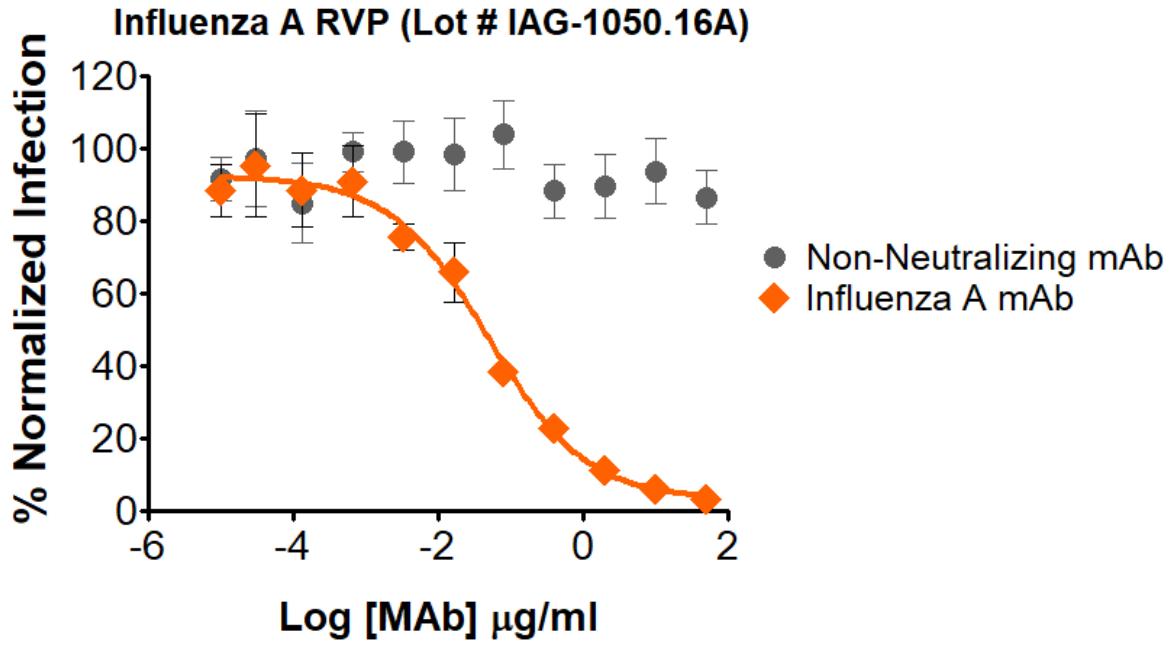
$$\left[\left(\frac{\%\ GFP\ positive\ cells}{100}\right) \times \left(\frac{9{,}000\ cells}{1\ well}\right) \times \left(\frac{1\ well}{RVP\ input\ (\mu l)}\right)\right] \times \frac{1000\ \mu l}{1\ mL} = X\ \frac{Transforming\ Units\ (TU)}{mL}$$

Integral Molecular | 25 N. 38th Street, Suite 800, Philadelphia, PA 19104

215.966.6061
info@integralmolecular.com
www.integralmolecular.com

INFECTIVITY AND NEUTRALIZATION DATA





Infectivity and neutralization determined in HEK-293T cells. Infectivity data represents the average of three independent vials, each tested in quadruplicate.

Neutralization utilized 5 μl of Influenza A 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).