



# TECH DATA SHEET

## REPORTER VIRUS PARTICLES

### DESCRIPTION

|                          |  |
|--------------------------|--|
| <b>Product</b>           | RVP-1205G, Influenza A Reporter Virus Particles (RVPs)                   |
| <b>Lot</b>               | IAG-461A   |
| <b>Subtype</b>           | H5N1   |
| <b>Strain</b>            | Vietnam/1203/2004  |
| <b>Reporter</b>          | GFP  |
| <b>Size</b>              | 1.0 mL/vial  |
| <b>Packaging</b>         | 20% FBS/DMEM   |
| <b>Viral Titer</b>       | $5.98 \times 10^7$ TU/mL   |
| <b>Recommended Input</b> | 1 $\mu$ L per well (96-well plate) for >20% infectivity in a flow assay* |
| <b>Mycoplasma Test</b>   | Negative   |
| <b>Expiration Date</b>   | February 2027  |

### SAFETY & HANDLING

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

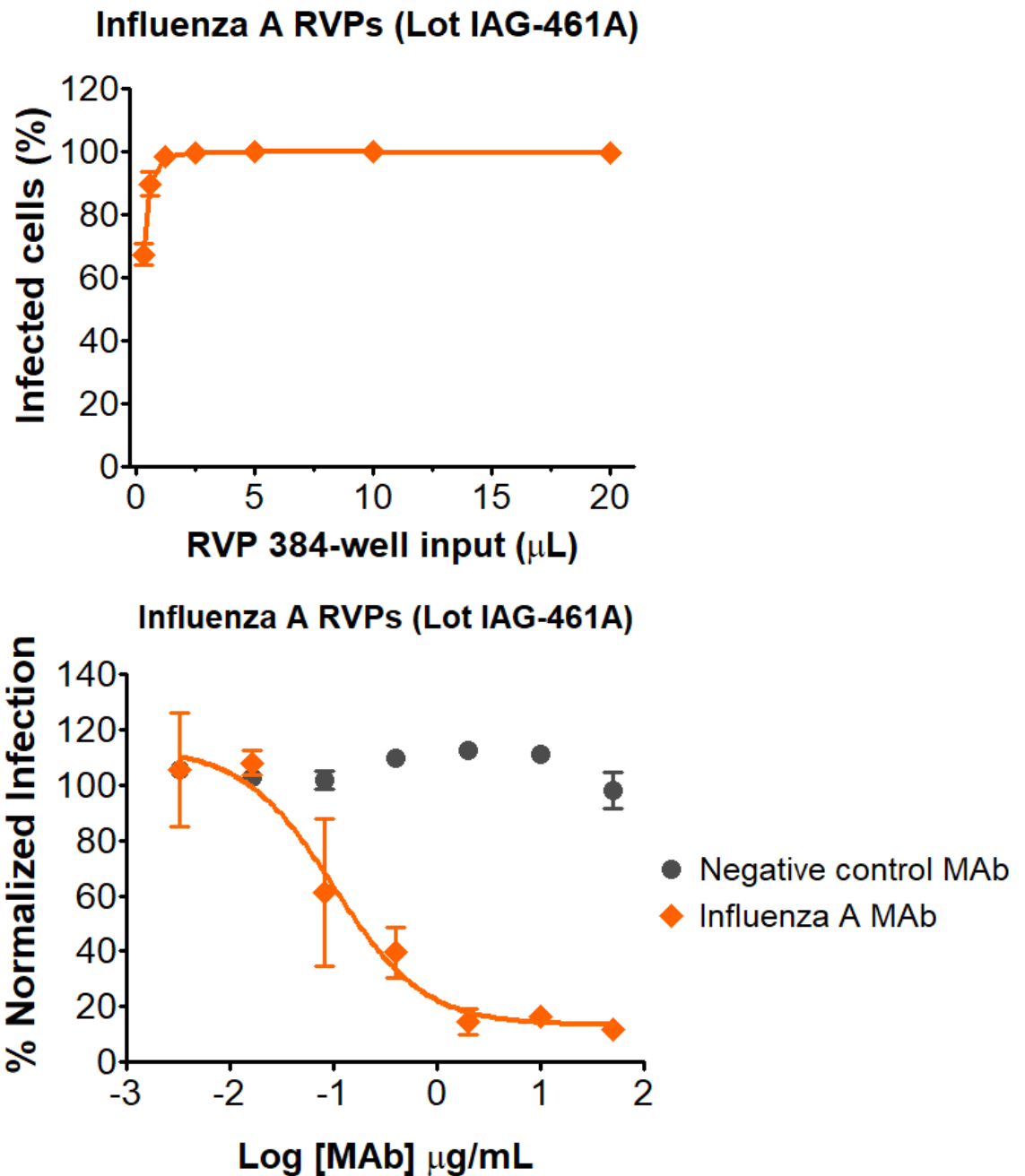
\* Determined in the HEK-293T cell line

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 and 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  $37^{\circ}\text{C}$  water bath for 2-3 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 AND NEUTRALIZATION DATA



Infectivity and neutralization determined in HEK-293T cells.

Neutralization utilized 0.3µL 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).