



# TECH DATA SHEET

## REPORTER VIRUS PARTICLES

### DESCRIPTION

<b>Product</b>	RVP-1501G, Marburg Reporter Virus Particles (RVPs)
<b>Lot</b>	FG-400B
<b>Strain</b>	Uganda 2007 (01Uga07)
<b>Reporter</b>	GFP
<b>Size</b>	1.0 mL/vial
<b>Packaging</b>	20% FBS/DMEM
<b>Viral Titer</b>	7.9 x 10 <sup>6</sup> TU/ml
<b>Recommended Input</b>	2.5µL per well (96-well plate) for ~20% infectivity in a flow assay*
<b>Mycoplasma Test</b>	Negative
<b>Expiration Date</b>	September 2026

### SAFETY & HANDLING

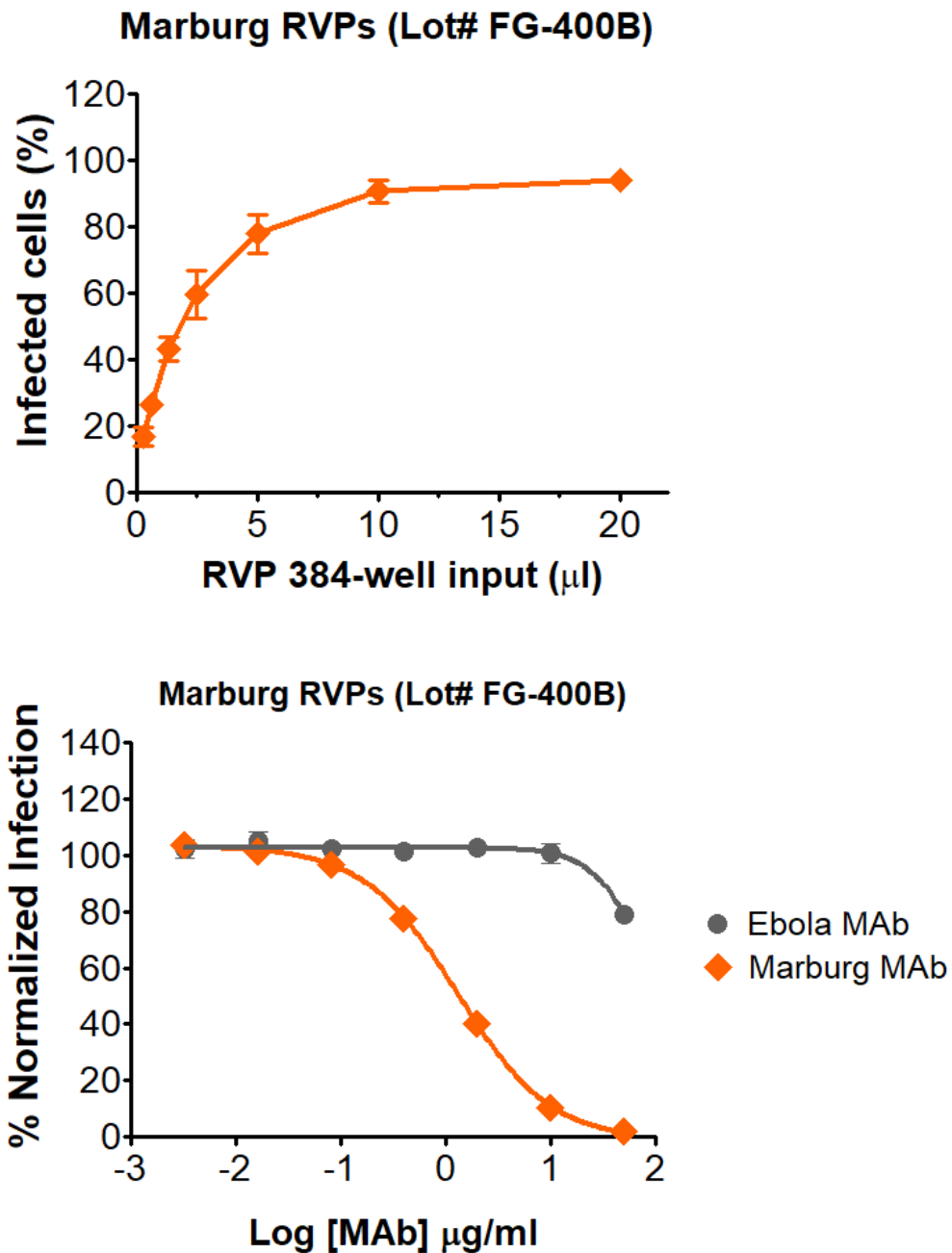
<b>Shipping</b>	Shipped on dry ice
<b>Stability and Storage</b>	Store at $\leq -80^{\circ}\text{C}$ upon receipt

\* Determined in the Huh-7 cell line

Marburg RVPs are used to test the ability of serum, antibodies, and drugs to neutralize the infectivity of the Marburg glycoprotein (GP). RVPs display antigenically correct glycoprotein 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 glycoprotein, 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 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 &amp; NEUTRALIZATION DATA



Infectivity and neutralization determined in Huh-7 cells.

Neutralization utilized 5 µl of Marburg 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).