



# TECH DATA SHEET

## REPORTER VIRUS PARTICLES

### DESCRIPTION

|                          |                                                     |
|--------------------------|-----------------------------------------------------|
| <b>Product</b>           | RVP-1002L, VSV Reporter Virus Particles (RVPs)      |
| <b>Lot</b>               | VL-817A                                             |
| <b>Strain</b>            | Indiana                                             |
| <b>Reporter</b>          | <i>Renilla</i> Luciferase                           |
| <b>Size</b>              | 1.0 mL/vial                                         |
| <b>Packaging</b>         | 20% FBS/DMEM                                        |
| <b>Recommended Input</b> | 1 $\mu$ L per well (96-well plate) for a S:B > 200* |
| <b>Mycoplasma Test</b>   | Negative                                            |
| <b>Expiration Date</b>   | February 2029                                       |

### SAFETY & HANDLING

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

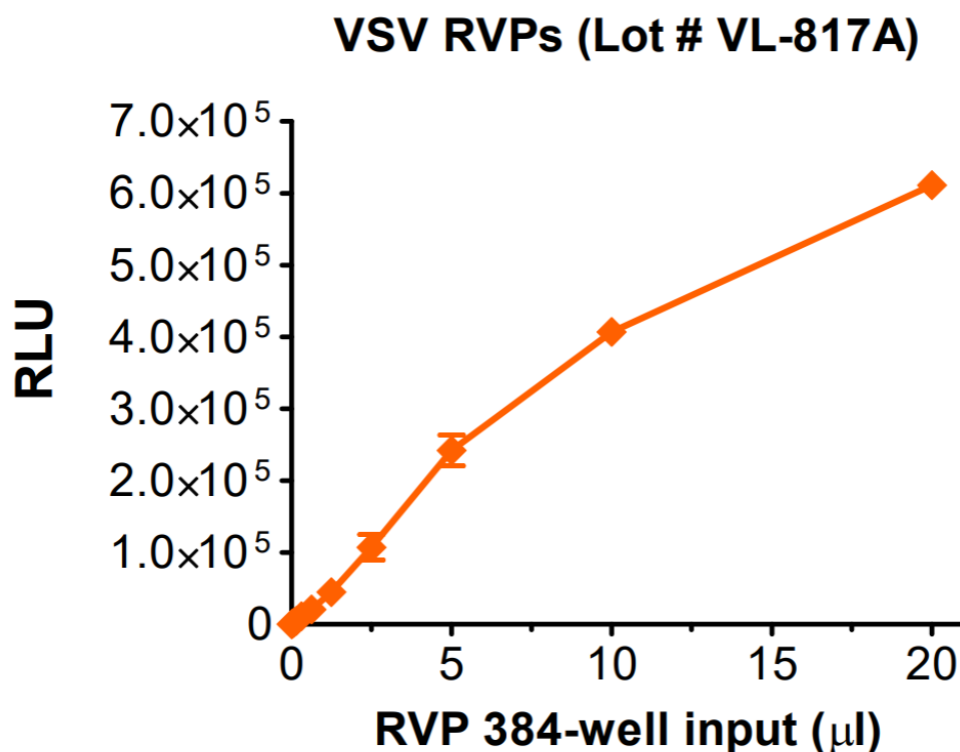
\* Determined in the HEK-293T cell line. Signal-to-background values can vary depending on instrument make, model, and/or calibration.

VSV (vesicular stomatitis virus) RVPs are designed as a control for Integral Molecular's RVP offerings to test for non-specific factors that affect virus infectivity. RVPs display an antigenically correct VSV envelope glycoprotein pseudotyped on replication-incompetent virus particles that contain a heterologous gammaretroviral (MLV) 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 envelope protein, a gammaretroviral gag polyprotein, and a reporter gene.

VSV RVPs are created using a second-generation gammaretroviral system with components that are highly unlikely to recombine to produce a fully infectious virus (requiring 3 separate recombination events to do so). However, gammaretroviruses 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.

## INFECTIVITY DATA



Infectivity is determined in HEK-293T cells. Data are based on two independent tubes, each tested in quadruplicate.

*Renilla* luciferase activity measured using the Promega *Renilla*-Glo luciferase assay system (Promega #E2710). Sample luminescence was read using a Perkin-Elmer Envision plate reader.

| SIGNAL TO BACKGROUND    |                    |
|-------------------------|--------------------|
| RVP 384-well Input (μl) | Signal: Background |
| 20                      | 27497              |
| 10                      | 18309              |
| 5                       | 10917              |
| 2.5                     | 4845               |
| 1.25                    | 2019               |
| 0.63                    | 931                |
| 0.31                    | 518                |

Signal to background is calculated using mock infected cells as the negative control value.