TECH DATA SHEET

REPORTER VIRUS PARTICLES

DESCRIPTION	
Product	RVP-401L, Dengue-4 (DENV4) Reporter Virus Particles (RVPs)
Lot	DL-539B
Strain	TVP360
Reporter	*Renilla* luciferase
Size	1.0 mL/vial
Packaging	20% FBS/DMEM
Recommended Input	1µL per well (96-well plate) for a S:B > 200*****
Mycoplasma Test	Negative
Expiration Date	June 2028

SAFETY & HANDLING	
Shipping	Shipped on dry ice
Stability and Storage	Store at ≤ -80°C

***** Determined in the BHK DC-SIGN stable cell line. Signal-to-background values can vary depending on instrument make, model, and/or calibration.

DENV RVPs are used to test the ability of serum, antibodies, and drugs to neutralize infectivity. DENV RVPs are structurally intact Dengue virus-like particles, capable of a single round of infection and carry a genome that expresses a luciferase optical reporter gene upon infection. RVPs are derived from a baby hamster kidney cell line (BHK-21) and are produced using DENV CprME structural genes and a Flavivirus reporter replicon.

RVPs are designed to have structural and antigenic equivalence to live viruses and are highly unlikely to recombine to produce a fully infectious virus. However, RVPs are derived from biological materials and should be handled with caution within a BSL2 laboratory environment. RVPs are not to be used in humans or in animals raised for food.

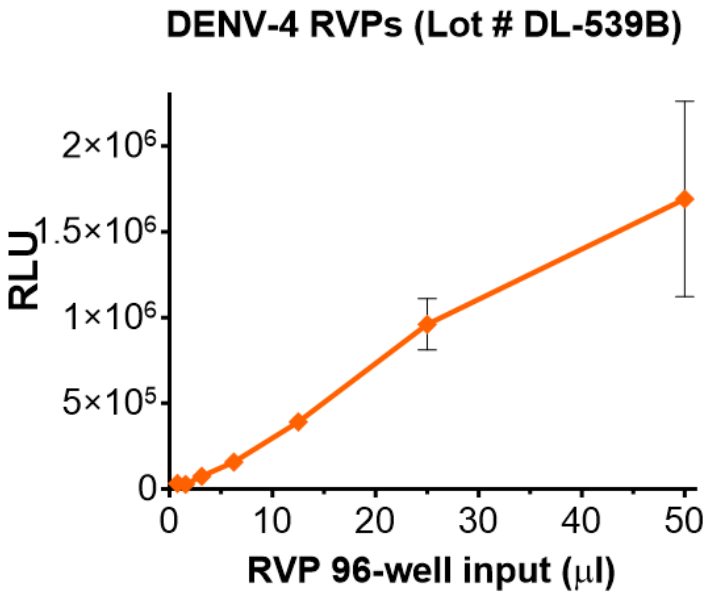
Thaw vial(s) in a 37°C water bath for 2-3 minutes and place on ice until ready to use. Gently mix prior to use and pulse vial for 3 seconds at high speed in a tabletop microfuge to recover all volume. Vortexing of RVPs should be avoided. Re-freezing of RVPs is not recommended.

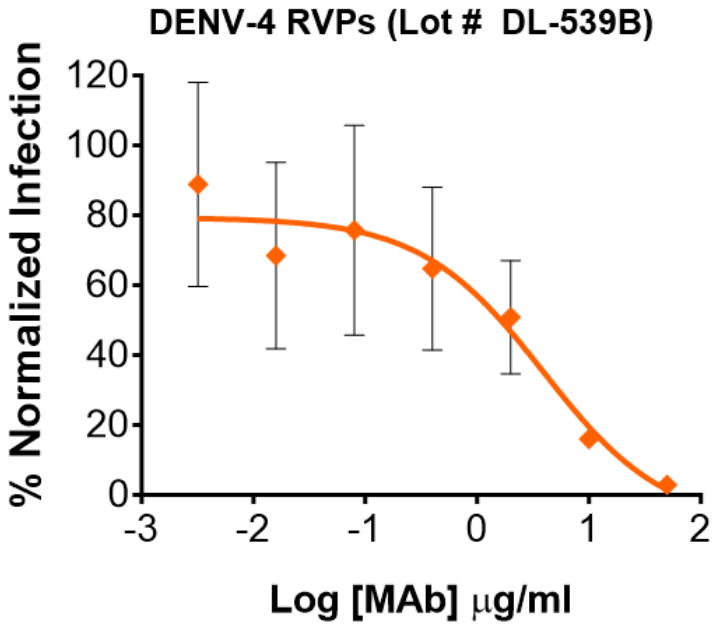
Integral Molecular | 25 N. 38th Street, Suite 800, Philadelphia, PA 19104

215.966.6061
info@integralmolecular.com
www.integralmolecular.com

Version 2, 05/07/2025

INFECTIVITY AND NEUTRALIZATION DATA





Infectivity determined in BHK DC-SIGN cells (Cat# C-BD101). Infectivity data represents the average of three independent vials, each tested in duplicate.

Neutralization (using a DENV-4 monoclonal antibody) utilized 5 µl of DENV RVPs in a 96-well plate. *Renilla* luciferase activity measured using the Promega *Renilla* luciferase assay system (Promega #E2810). Sample luminescence was read using a Perkin-Elmer Envision plate reader.

SIGNAL TO BACKGROUND	
RVP 96-well Input (µl)	**Signal:Background**
50	30797
25	17131
12.5	6900
6.25	2787
3.13	1302
1.56	481
0.78	567

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