

Filovirus Reporter Virus Particles

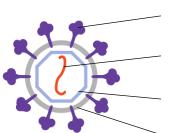
Filovirus Reporter Virus Particles

Ebola and Marburg are two of the deadliest viruses known, and 'live' virus studies require specialized BSL-4 containment for safe handling. Integral Molecular introduces Filovirus Reporter Virus Particles (RVPs): replication-incompetent pseudotyped virus particles that enable safe (BSL-2), easy, and high-throughput viral infectivity and neutralization assays using standard detection instrumentation.

RVPs display antigenically correct envelope glycoprotein (GP) on a heterologous virus core and carry a modified genome that expresses a convenient optical reporter gene (GFP or luciferase) within 24 hours of cellular infection. Filovirus RVPs are available as a ready-to-use reagent that provides a safe and efficient alternative to plaque assays and are produced under quality-controlled conditions as a critical reagent.

Advantages of Filovirus RVPs

- Safe in a BSL-2 environment
- Quantitative (luciferase) or fluorescent (GFP) read-out
- Compatible with high-throughput plate-based assays
- Quality-controlled production for use as a critical reagent



Ebola or Marburg Filovirus glycoprotein (GP)

Reporter gene (Luciferase/GFP)

Heterologous core (Lentivirus)

Lipid bilayer

- Antibody neutralization
- Serum screening
- High-throughput assays

Zaire ebolavirus RVPs undergo a single round of infectivity. Infection (in Huh-7 cells) was inhibited by a neutralizing monoclonal antibody. A control antibody did not inhibit infection.

Log [MAb] µg/mL

Filovirus RVPs

Virus	Cat. No
Zaire Ebolavirus (Mayinga/76)	RVP-1401
Marburg Virus (Uganda 2007)	RVP-1501

Additional RVPs

Virus	Cat. No
SARS-CoV-2 (70+ variants)	RVP-701 to 775
Dengue Virus Serotypes 1-4	RVP-101, 201, 301, 401
Zika Virus	RVP-601
Influenza A Virus	RVP-1201
Influenza B Virus	RVP-1301, 1303
Chikungunya Virus	RVP-1101
Negative Control RVPs (VSV)	RVP-1002
See our complete catalog for additional viruses	

See our complete <u>catalog</u> for additional viruses. Custom RVPs or variants are available upon request.

With two decades of virology experience, Integral Molecular is the industry leader in providing RVPs for applications including antibody R&D and serum screening for vaccine clinical trials.

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Integral Molecular's Virology & Membrane Protein Solutions

OUR MISSION

Founded in 2001, Integral Molecular's mission is to develop and apply innovative technologies that advance therapeutic discovery against difficult protein targets including viral proteins.



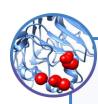
Virology

The most comprehensive catalog of Reporter Virus Particles, including SARS-CoV-2, dengue, Zika, and influenza

WHY WORK WITH US

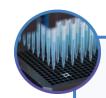
Deep expertise in virology is at the core of Integral Molecular's 20-year history. Our technologies and R&D services enable over 400 companies working in vaccine research and drug discovery and have been published in over 350 peer-review publications including in *Cell*, *Science*, and *Nature*.

Over the past 10 years, scientists at Integral Molecular have been on the forefront of combatting viral epidemics such as Zika, Ebola, and Chikungunya, in addition to working on dengue, HIV, RSV, Hepatitis C, Hepatitis B, Equine Encephalitis, and influenza viruses.



Epitope Mapping

Conformational, high-resolution mapping to characterize antiviral antibodies, help predict viral escape and optimize MAb cocktails



MAb Specificity Profiling

The largest array of membrane proteins for *in vitro* safety & specificity profiling of antibody-based therapeutics



YEARS VIROLOGY EXPERIENCE

85+

REPORTER VIRUSES & VARIANTS



Lipoparticles

Virus-like particles with highconcentration, native proteins for immunization and screening

TRUSTED BY

100+

VIROLOGY LABORATORIES **CONTRIBUTIONS**

200+

TO VIROLOGY PUBLICATIONS



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MPS Antibody Discovery

MAbs against highly conserved, structurally complex membrane proteins delivered with >95% success

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