

Aug 23, 2024 Version 1

# Infecting Cells with SeV or RSV in A549 or LLCMK2 cells V.1

DOI

**[dx.doi.org/10.17504/protocols.io.dm6gpzeojlp/v1](https://dx.doi.org/10.17504/protocols.io.dm6gpzeojlp/v1)**

Carolina Lopez<sup>1</sup>

<sup>1</sup>Washington University



Carolina Lopez

Washington University

OPEN  ACCESS



DOI: **[dx.doi.org/10.17504/protocols.io.dm6gpzeojlp/v1](https://dx.doi.org/10.17504/protocols.io.dm6gpzeojlp/v1)**

**Protocol Citation:** Carolina Lopez 2024. Infecting Cells with SeV or RSV in A549 or LLCMK2 cells. **protocols.io**  
**<https://dx.doi.org/10.17504/protocols.io.dm6gpzeojlp/v1>** Version created by **[Sydney Faber](#)**

**License:** This is an open access protocol distributed under the terms of the **[Creative Commons Attribution License](#)**, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

**Protocol status:** Working

**We use this protocol and it's working**

**Created:** March 21, 2024

**Last Modified:** August 23, 2024

**Protocol Integer ID:** 104183

## Abstract

Infection of SeV or RSV in A549 or LLCMK2 cells



## Materials

### **INFECTION MEDIUM – SeV:** Filter through 0.2 µm filter

Component	Amount	Conc. Supp.	Product information
DMEM	500 mL		Gibco Cat. # 11965092 (#11965118-cs)
Pen/Strep	5.0 mL	100 U/mL Pen and 100 µg/mL Strep	Gibco Cat # 15140-122 – 10,000 U/mL
BSA 35%	5.0 mL	0.35%	Sigma Aldrich Cat #A7979 – 35%
Sodium Bicarbonate (NaHCO <sub>3</sub> ) 7.5%	12 mL	0.18%	Gibco Cat #25080094 – 7.5%

### **TRYPSIN – TPCK** (Worthington Biochemicals code: TRLVMF cat.no. LS004454)

### **INFECTION MEDIUM – RSV:** Filter through 0.2 µm filter

Component	Amount	Conc. Supp.	Product information
DMEM	500 mL		Gibco Cat. # 11965092 (#11965118-cs)
Gentamicin	500 µL	50µg/mL	Gibco Cat #15750060 (#15750078-pk) – 50 mg/mL
Sodium Pyruvate	5.0 mL	1mM	Corning Cat #25-000-CI – 100mM
L-Glutamine	5.5 mL	2 mM	Sigma Aldrich Cat #G7513 – 200mM
FBS	10 mL	2%	



## Infecting Cells with SeV or RSV in A549 or LLCMK2 cells

### 1 Infecting cells with SeV or RSV in A549 or LLCMK2 cells

1. Prepare a virus dilution in infection media with the correct virus-specific media (see materials section for media composition).
  - Calculate the volume of virus needed (X) using the MOI formula:  
 $(\text{MOI} \times \text{cell number}) / \text{Virus titer} = X$
  - The amount of infection media used to prepare the virus will depend on the size of the well or plate used - it is best to use the minimal volume needed to cover the well/plate to help ensure virus particle attachment to cells
2. Remove TCM
3. Wash cells twice with 1X PBS
4. Add X $\mu$ L of virus suspended in infection media to each well (calculated in step 1)
5. Incubate the plate for 1 hr @ 37°C, rocking the plate/flask every 15 minutes
6. Remove the media
7. Wash twice with 1X PBS
8. Add infection media to each well/flask
  - For SeV infection: add SeV-Infection media, for SeV infection in LLCMK2 cells: add TRYPSIN –TPCK to the infection media for a final concentration of 2 $\mu$ g/mL TRYPSIN –TPCK
  - For RSV infection: add RSV-Infection media (2%FBS)
9. Place the plate/flask back in a 37°C, 5% CO<sub>2</sub> incubator