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

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Protocol status: Working

We use this protocol and it's working

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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 ₃) 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 μL 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 $\mu\text{g/mL}$ TRYPSIN –TPCK
 - For RSV infection: add RSV-Infection media (2%FBS)
9. Place the plate/flask back in a 37°C, 5% CO₂ incubator