BHK Cell and Virus Propagation Medium

Dillon Corvino

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Protocol ID: BUF-BHK-PROP **Version:** v1.1 **Author:** Dillon Corvino **Date:** 2026-09-18

Purpose

This medium is used for propagation of BHK-21 cells and for LCMV production workflows.

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Linked protocols

- `MUS-LCMV-PROD`

Working buffer composition

Final volume: 500 mL

Component	Amount
DMEM, high glucose	500 mL
200 mM L-glutamine	10 mL
Heat-inactivated FBS (56°C, 30 min)	50 mL (10%)
Tryptose phosphate broth	25 mL (5%)
Pen/Strep (10,000 U/mL penicillin G, 10,000 ug/mL streptomycin)	5 mL

Preparation

A. Preparation of stock (if applicable)

Not applicable — prepared directly as the working buffer.

B. Preparation of working buffer

1. Add DMEM to a sterile bottle.
2. Add 200 mM glutamine, FBS, tryptose phosphate broth, and Pen/Strep.
3. Mix gently by inversion.
4. Warm medium to **37°C** before use.

> **!** Important
>
> Do **not** filter-sterilize after adding FBS. Assemble the medium using sterile technique throughout instead.

Storage and stability

- Store at **4°C** for up to **4 weeks**.

Reagent details

Component	Supplier	Cat#	Notes
DMEM, high glucose	[TBD]	[TBD]	Base medium
200 mM L-glutamine	[TBD]	[TBD]	
FBS	[TBD]	[TBD]	Heat-inactivate at 56°C for 30 min
Tryptose phosphate broth	[TBD]	[TBD]	

Component	Supplier	Cat#	Notes
Pen/Strep	[TBD]	[TBD]	10,000 U/mL penicillin G, 10,000 ug/mL streptomycin

Safety (brief)

- FBS and tryptose phosphate broth are animal-derived materials; handle as potential biohazards per institutional biosafety rules.
- This medium is used for BHK-21 cell culture and LCMV virus propagation — follow institutional biosafety protocols when handling virus-containing supernatants.

Version history

Version	Date	Author	Changes
v1.0	2025-12-01	Dillon Corvino	Initial Quarto buffer document
v1.1	2026-09-18	Dillon Corvino	Migrated to shared summary:/helper architecture (buffer/protocol redesign); added Storage/Safety/Reagent-details sections.