3% Medium (IEL Wash/Base Medium)

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Protocol ID: BUF-IEL-3PCT **Version:** v1.0 **Author:** Dillon Corvino **Date:** 2026-09-18

Purpose

Low-serum RPMI wash medium used to wash the opened small intestine before stripping, and as the base medium for IEL Strip Medium (`BUF-IEL-STRIP`).

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Linked protocols

- `MUS-IEL-ISO`

Working buffer composition

50 mL per mouse (20 mL for intestinal washes + 20 mL as base for Strip Medium + ~10 mL margin).

Component	Final concentration	Volume for 50 mL
RPMI 1640	Base	46.0 mL
FCS	3% (v/v)	1.5 mL
HEPES (1 M stock)	2% (v/v)	1.0 mL
Penicillin/Streptomycin (100x stock)	1% (v/v)	0.5 mL
L-glutamine (200 mM stock)	1% (v/v)	0.5 mL

Preparation

A. Preparation of stock (if applicable)

Not applicable — prepared directly as the working buffer.

B. Preparation of working buffer

1. Combine RPMI 1640 with FCS, HEPES, Penicillin/Streptomycin, and L-glutamine per the table above.
2. Mix gently by inversion.

Storage and stability

- Can be prepared the evening before use and held at **4 °C**.
- Bring to room temperature or 37 °C (as needed) before use.

Reagent details

Component	Supplier	Cat#	Notes
RPMI 1640	[TBD]	[TBD]	
FCS	[TBD]	[TBD]	
HEPES (1 M stock)	[TBD]	[TBD]	
Penicillin/Streptomycin (100x)	[TBD]	[TBD]	
L-glutamine (200 mM stock)	[TBD]	[TBD]	

Safety (brief)

- FCS is of animal origin and should be treated as a potential biohazard.
- Not applicable beyond standard laboratory PPE.

Version history

Version	Date	Author	Change summary
v1.0	2026-09-18	Dillon Corvino	Split out of `prot_mus_iel_isolation.qmd` into its own buffer document (buffer/protocol architecture redesign) — no change to composition.