IEL Shake Medium

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

Purpose

Used for the manual shake wash steps that mechanically dislodge residual intraepithelial lymphocytes (IELs) from intestinal tissue after DTT/EDTA stripping.

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Linked protocols

- `MUS-IEL-ISO`

Working buffer composition

25 mL per mouse (2 x 10 mL for shake rounds + ~5 mL margin).

EDTA stock: 500 mM. For 2 mM final in 25 mL: add **100 uL** EDTA stock.

Component	Final concentration	Volume for 25 mL
RPMI 1640	Base	23.6 mL
L-glutamine (200 mM stock)	1% (v/v)	250 uL
Penicillin/Streptomycin (100x stock)	1% (v/v)	250 uL
HEPES (1 M stock)	2% (v/v)	500 uL
EDTA (500 mM stock)	2 mM	100 uL

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 L-glutamine, Penicillin/Streptomycin, HEPES, and EDTA per the table above.
2. Mix gently by inversion.

Storage and stability

- Can be prepared the evening before use and held at **4 °C**.

Reagent details

Component	Supplier	Cat#	Notes
RPMI 1640	[TBD]	[TBD]	
L-glutamine (200 mM stock)	[TBD]	[TBD]	
Penicillin/Streptomycin (100x)	[TBD]	[TBD]	
HEPES (1 M stock)	[TBD]	[TBD]	
EDTA (0.5 M stock)	[TBD]	[TBD]	

Safety (brief)

Not applicable — no reagent-specific hazards 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.