

Jun 11, 2019

## Immune Cell Isolation from Mouse Spleen

Grace Burgin<sup>1</sup>, Noga Rogel<sup>1</sup>, Moshe Biton<sup>1</sup>

<sup>1</sup>Regev Lab, Broad Institute

Working dx.doi.org/10.17504/protocols.io.nm2dc8e





ABSTRACT

To isolate immune cells from a mouse spleen before sorting

MATERIALS				

NAME CATALOG # VENDOR

EZ-LINE Cell strainer, 70um Nylon PP, 50 per case

SP104181.SIZE.1CS

Bio Basic Inc.

10% FBS RPMI

- Prepare 50mL of 10% FBS RPMI media
  - **■5 ml FBS**
  - **■45 ml RMPI**



\*\*other media may be used

- Wet both sides of a 70µm filter with media above a 50mL conical (make sure there is some media in the conical)
- 3 Place spleen on filter, use the plunger base of a syringe to mash the spleen on to the filter while pouring media through
- Continue pouring media through filter while mashing until spleen is completely mashed. About 30 to 35mL of media should be used **■35 ml**
- Keep suspended cells on ice in the 10% FBS RPMI media until preparing for sort
- 6 Spin cells down at 350g for 3 min (pulse to 550g if necessary)
- Remove supernatant

8 Resuspend pellet in 1mL of ACK lysing buffer for 1 min on ice
© 00:01:00

9 Add 30mL of media, spin down at 350g for 3 min (pulse to 550g if necessary)



\*\*if pellet is still red, another round of ACK might be needed

**⊒30 ml** 

10 Stain with desired antibodies, filter with sorting filters, dilute if large pellet

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