

# FACT-mediated maintenance of chromatin integrity during transcription is essential for mammalian stem cell viability

Imon Goswami<sup>1, †</sup>, Poorva Sandlesh<sup>1, †, &</sup>, Aimee Stablewski<sup>2</sup>, Ilya Toshkov<sup>3</sup>, Alfiya F Safina<sup>1</sup>, Mikhail Magnitov<sup>4</sup>, Jianmin Wang<sup>5, \*</sup>, Katerina Gurova<sup>1, \*</sup>

## Table of contents:

Appendix Figure S1. Heatmap of expression of markers for each identified cluster of bone marrow cells.

Appendix Figure S2. Feature plots of expression of several markers of hematopoietic cells.

Appendix Figure S3. Heatmap of expression of markers of major bone marrow cell types.

Appendix Figure S4. Feature plots of expression of markers of major bone marrow cell types.

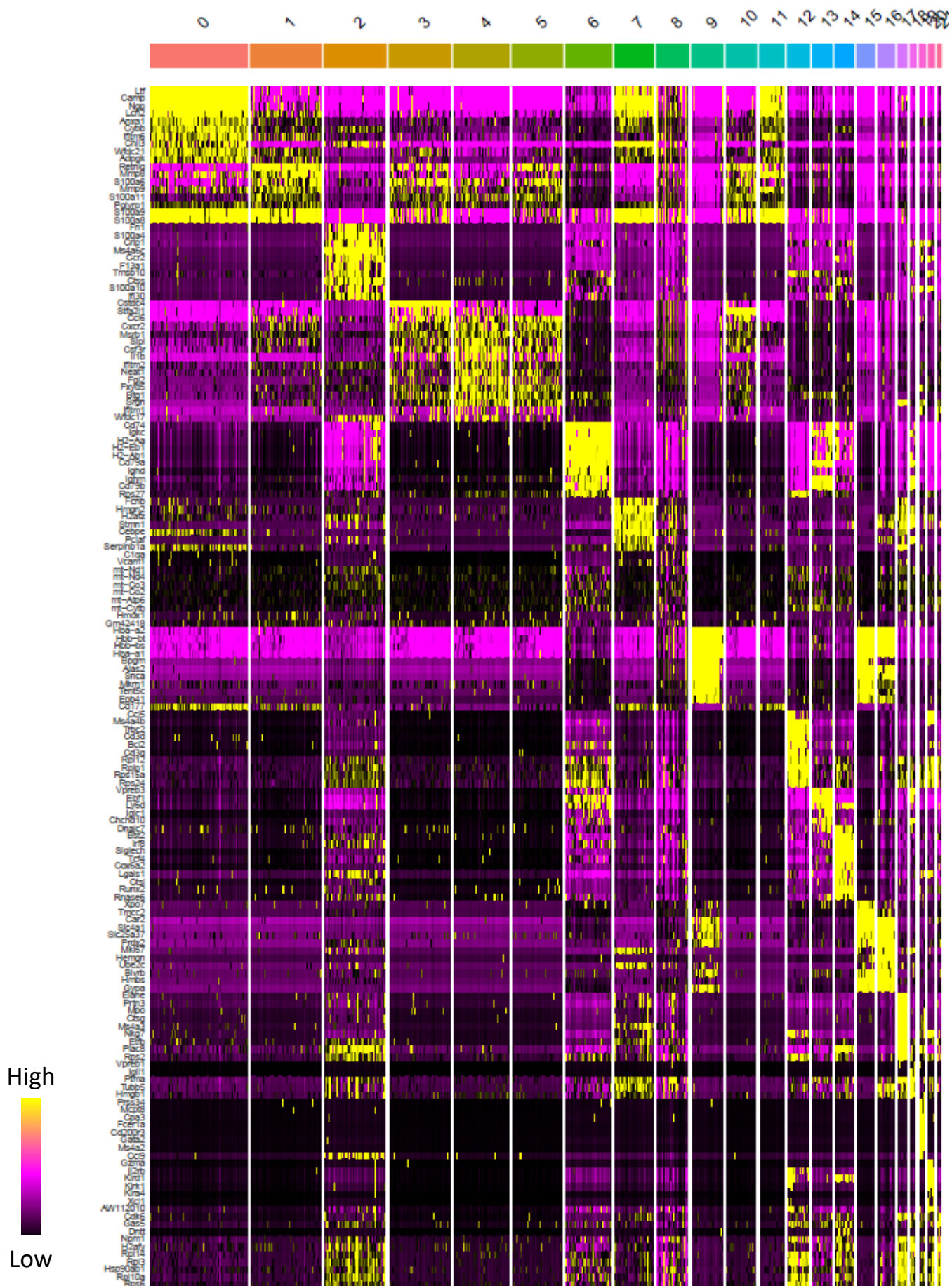
Appendix Figure S5. Heatmap of expression of markers for each identified cluster in intestine.

Appendix Figure S6. Features plot of expression of markers of major intestinal cell types (stem cell markers feature plots are shown on Fig.5)

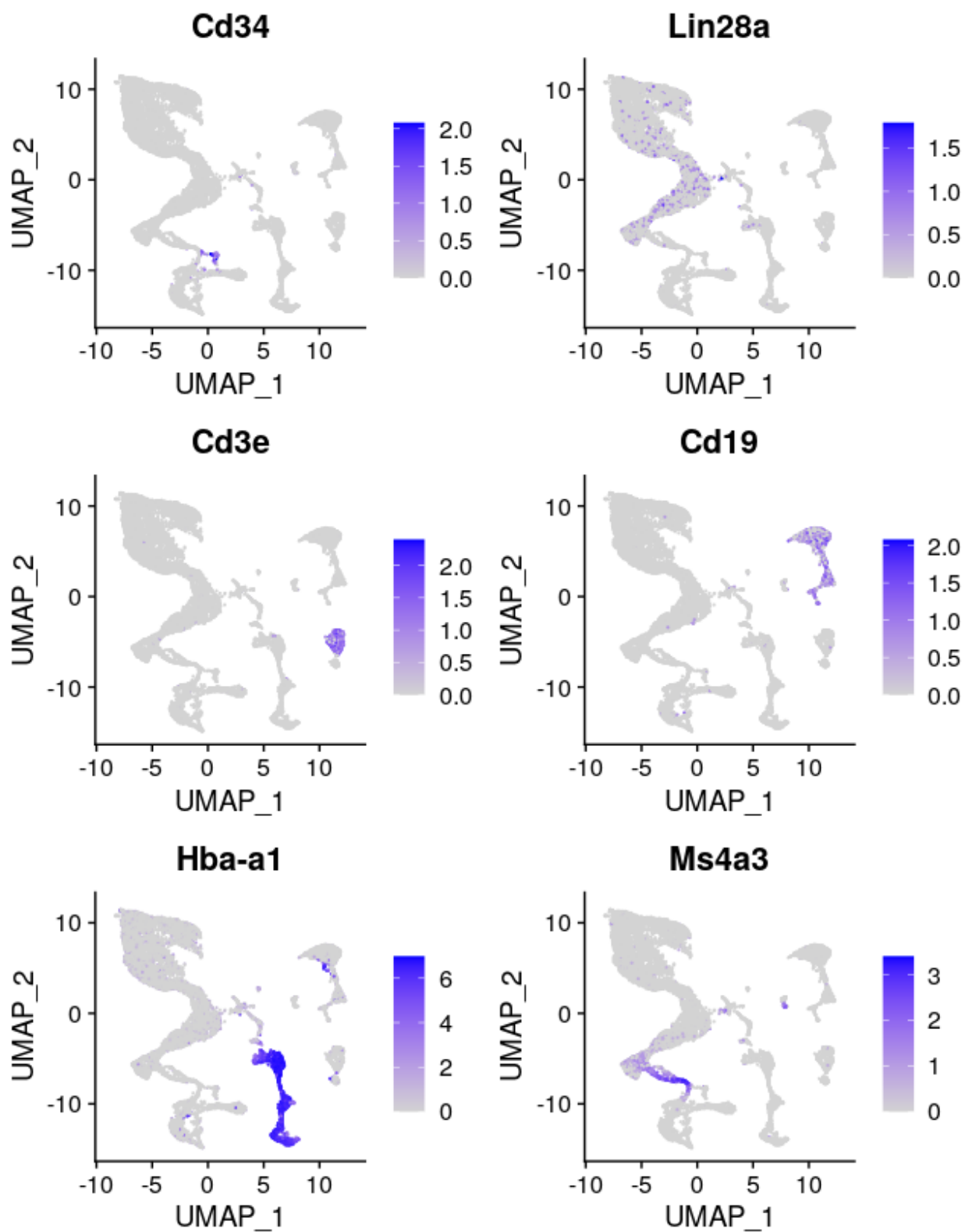
Appendix Figure S7. Feature plots of intestinal cell types.

Appendix Figure S8. Distribution of ATAC-seq fragment lengths in replicates of control (c1, c2) and 4-OHT treated (Rx1, Rx2) samples of cells homozygous or heterozygous for *Ssrp1<sup>fl</sup>* and *CreER<sup>T2</sup>* alleles.

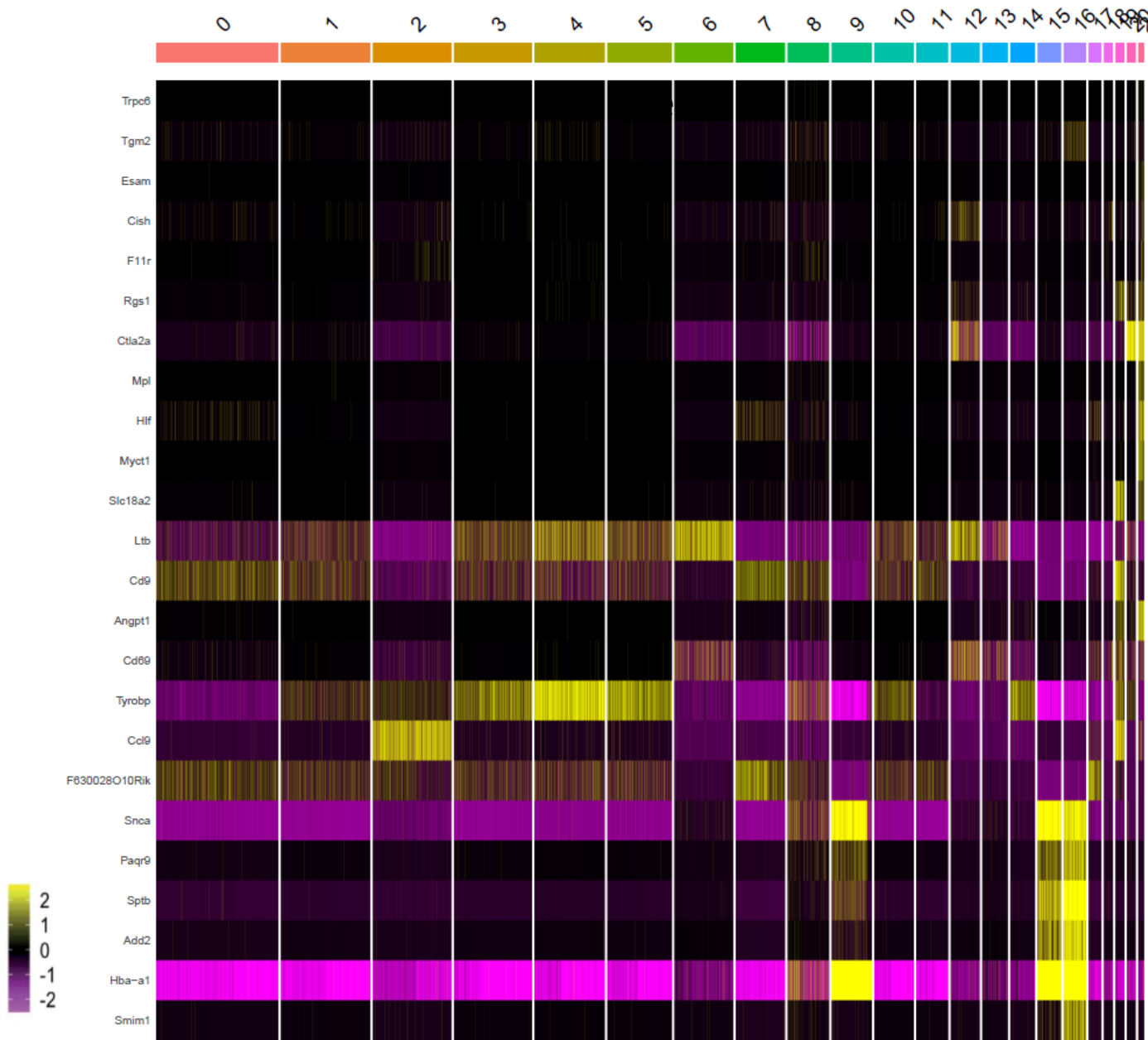
Appendix Figure S9. Alignment statistics of replicates of control (C1, C2) and 4-OHT treated (Rx1, Rx2) samples of cells homozygous (Homo) or heterozygous (Het) for *Ssrp1<sup>fl</sup>* and *CreER<sup>T2</sup>* alleles.



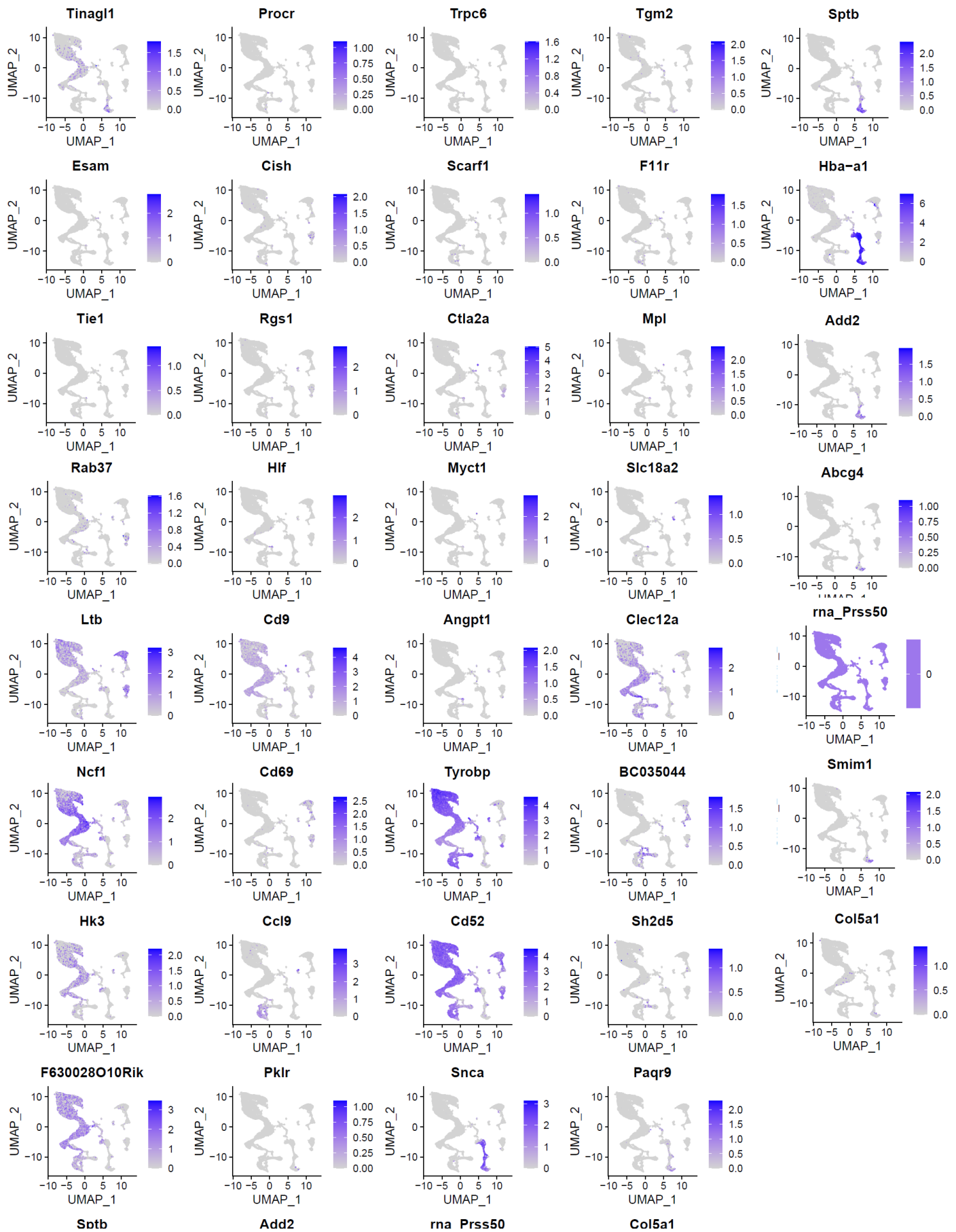
Appendix Figure S1. Heatmap of expression of markers for each identified cluster of bone marrow cells.

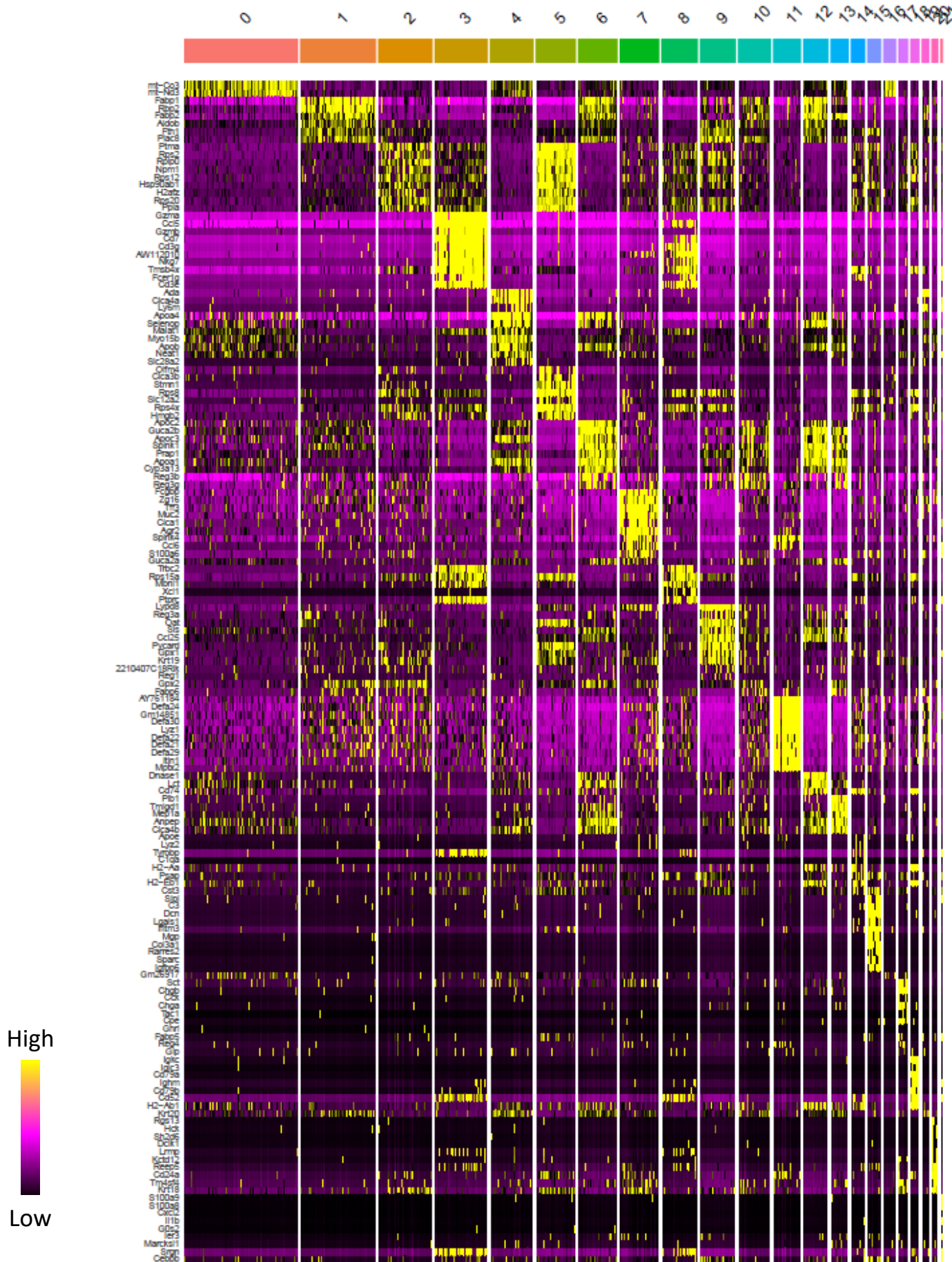


Appendix Figure S2. Feature plots of expression of several markers of hematopoietic cells.

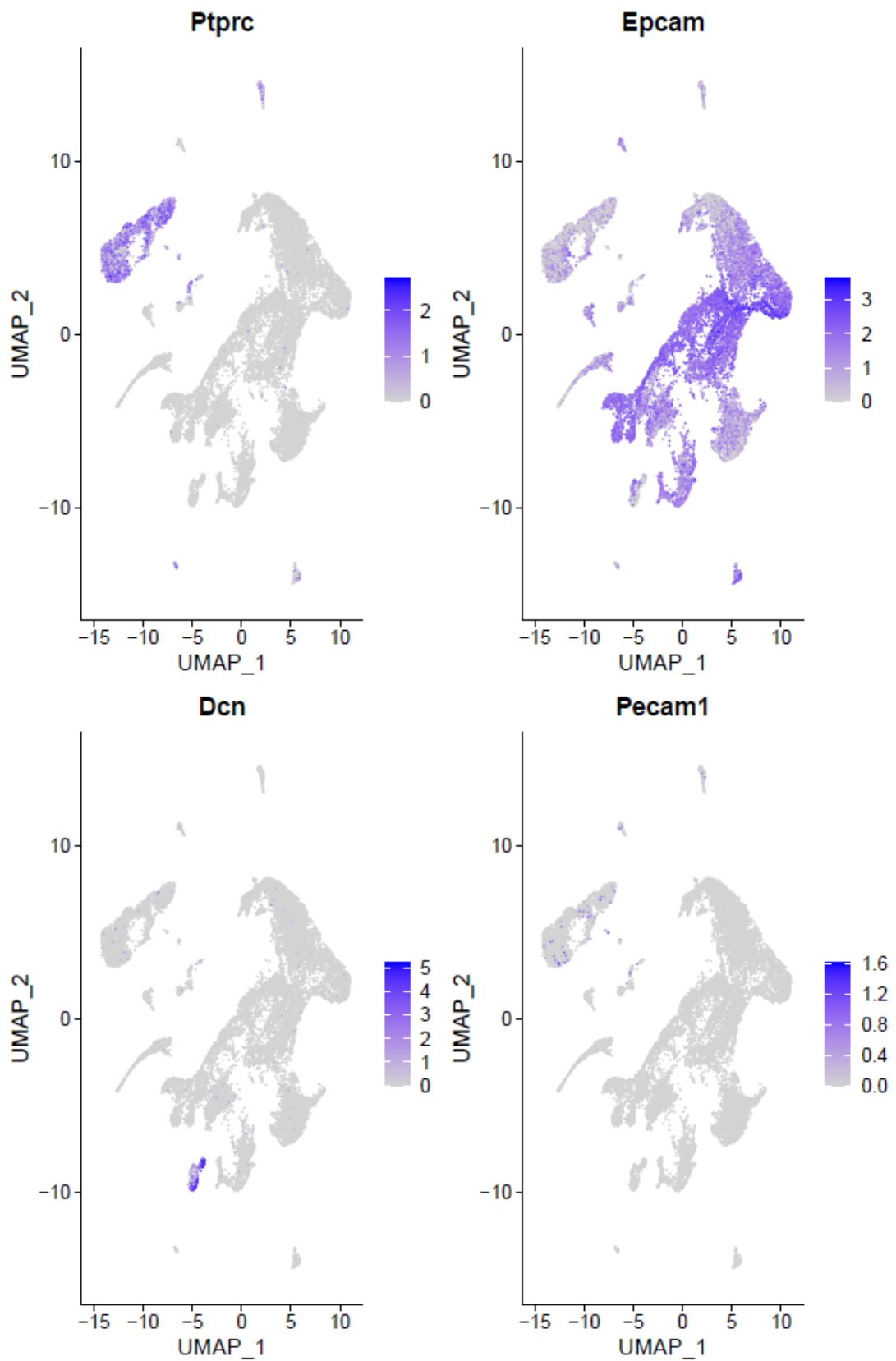


Appendix Figure S3. Heatmap of expression of markers of major bone marrow cell types.



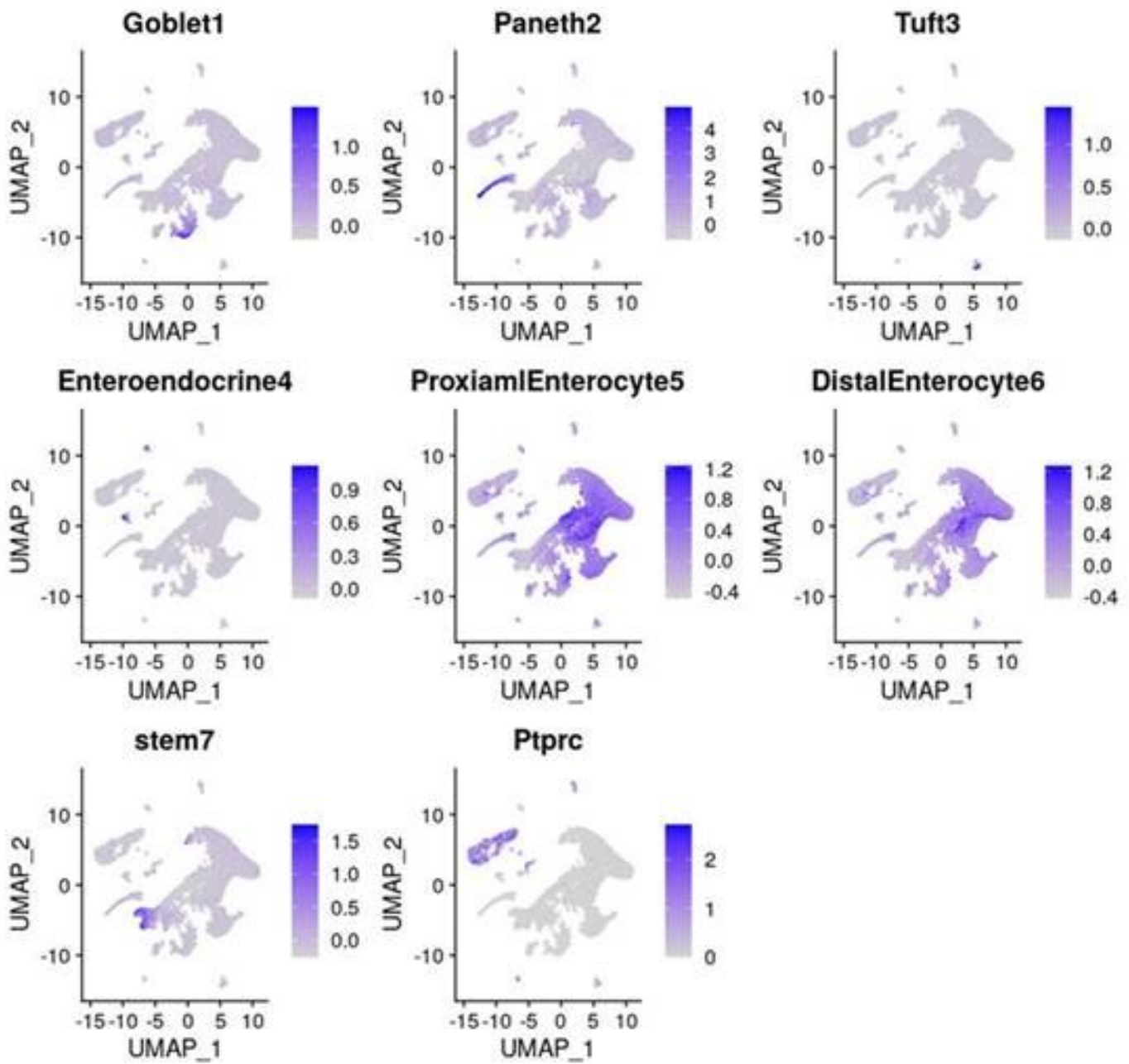


Appendix Figure S5. Heatmap of expression of markers for each identified cluster in intestine.



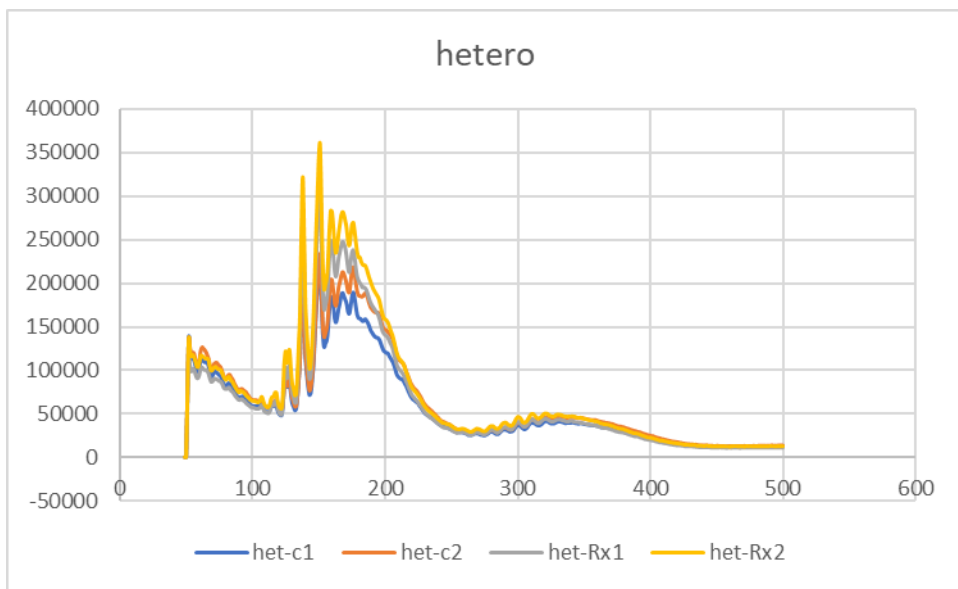
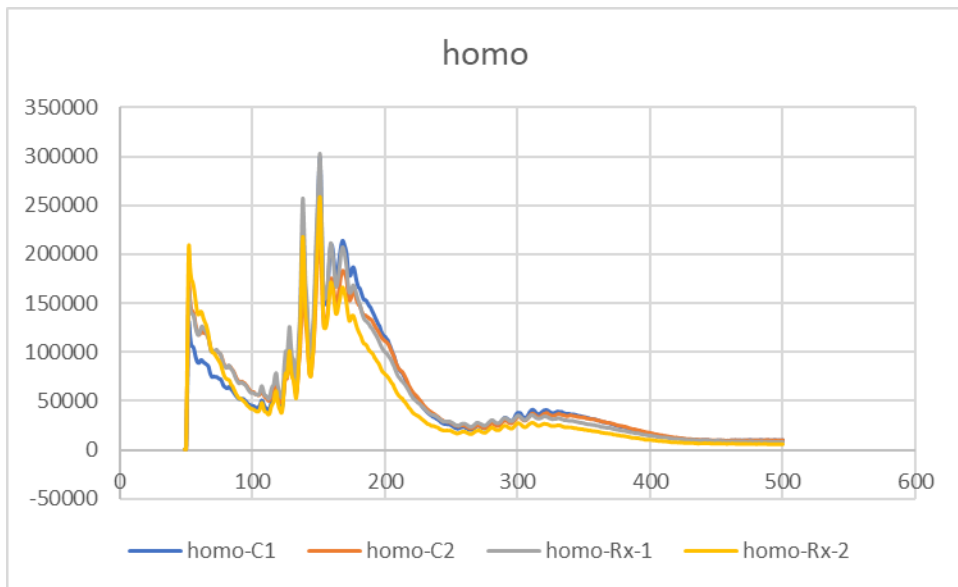
Appendix Figure S6. Features plot of expression of markers of major intestinal cell types (stem cell markers feature plots are shown on Fig.5)



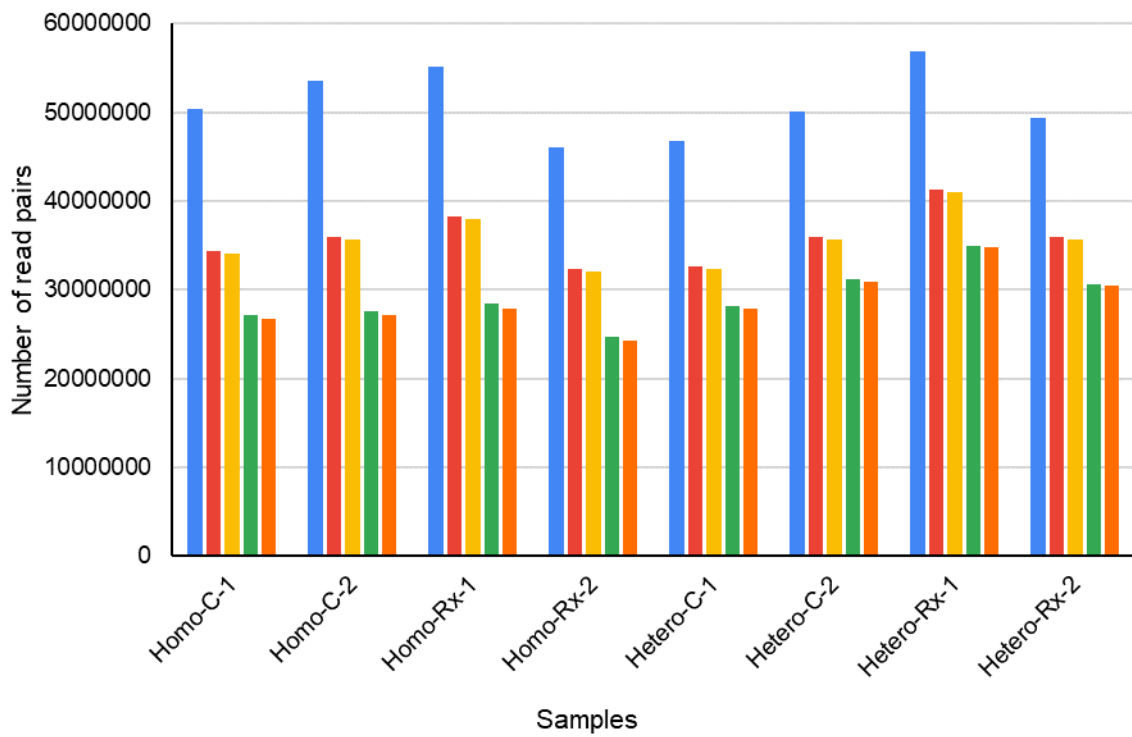


Appendix Figure S7. Feature plots of intestinal cell types.





Appendix Figure S8. Distribution of ATAC-seq fragment lengths in replicates of control (c1, c2) and 4-OHT treated (Rx1, Rx2) samples of cells homozygous or heterozygous for *Ssrp1<sup>fl</sup>* and *CreER<sup>T2</sup>* alleles.



- Initial read pairs
- Uniquely mapped pairs
- Pairs with MAPQ>30
- Removed PCR duplicate pairs
- Removed chrM read pairs

Appendix Figure S9. Alignment statistics of replicates of control (C1, C2) and 4-OHT treated (Rx1, Rx2) samples of cells homozygous (Homo) or heterozygous (Het) for *Ssrp1<sup>f1</sup>* and *CreER<sup>T2</sup>* alleles.