

Apr 20, 2022

# Counting kidneys

Gabriel J Barrero<sup>1</sup>, Abraham Palmer<sup>1</sup>, Oksana Polesskaya<sup>1</sup><sup>1</sup>UCSD

1

[dx.doi.org/10.17504/protocols.io.6qpvr6k4pvmk/v1](https://dx.doi.org/10.17504/protocols.io.6qpvr6k4pvmk/v1)

CGORD



Gabriel Barrero

Dissecting and counting kidneys in rats.

DOI

[dx.doi.org/10.17504/protocols.io.6qpvr6k4pvmk/v1](https://dx.doi.org/10.17504/protocols.io.6qpvr6k4pvmk/v1)

Gabriel J Barrero, Abraham Palmer, Oksana Polesskaya 2022. Counting kidneys.

**protocols.io**<https://dx.doi.org/10.17504/protocols.io.6qpvr6k4pvmk/v1>

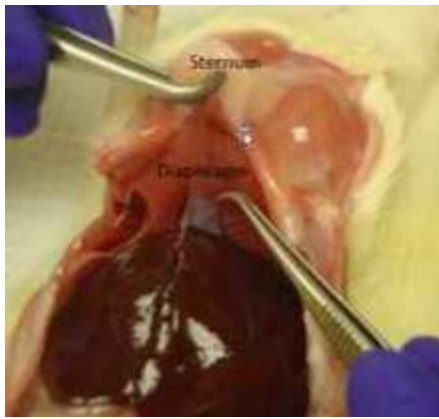
protocol ,

Apr 11, 2022

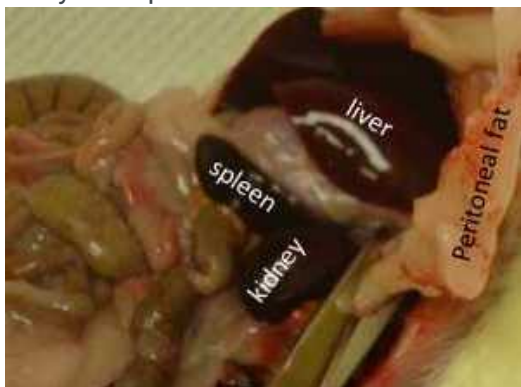
Apr 20, 2022

60610

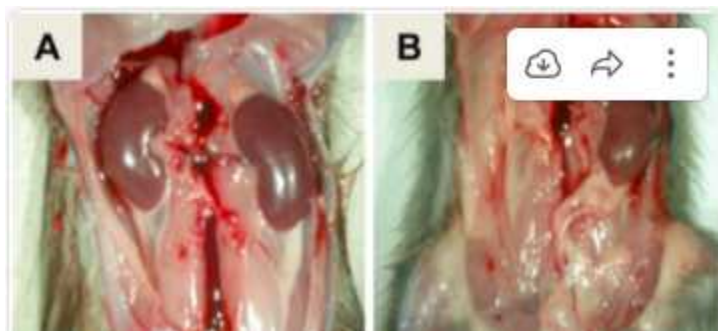
- 1 Rats are euthanized as per IACUC guidelines  
Spray fur with ethanol. Pick up skin above the sternum, and make a cut through skin and muscle layers.  
Don't cut the chest cavity (don't go above the diaphragm).
- 2 Cut skin and muscles from the sternum down to the lower belly. Mostly you will see liver and colon.



- 3 Lift liver lobes and push aside fat tissue and intestines. You will see dark-colored organs – kidney and spleen.



Gross dissection



Representative renal anomalies observed in rats. A. Grossly normal renal development. B. Unilateral renal agenesis (URA) PloS one. 10. e0118147. 10.1371/journal.pone.0118147

- 4 Count the number of observed kidneys and make a record in the file.