Video Article

Dissection of Drosophila Ovaries

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URL: <http://www.jove.com/index/Details.stp?ID=52>

DOI: 10.3791/52

Citation: Wong L.C., Schedl P. (2006). Dissection of Drosophila Ovaries. JoVE. 6. <http://www.jove.com/index/Details.stp?ID=52>, doi: 10.3791/52

Abstract

Protocol

1. Feed flies with yeast 1-2 days prior to dissecting them to fatten up the ovaries.
2. Anaesthetize flies using carbon dioxide stream.
3. Using a pair of tweezers, select a female fly.
4. Submerge the female fly into 1X PBS.
5. Grab the fly at its lower thorax with a pair of tweezers.
6. Tug gently at the lower abdomen with another pair of tweezers until the internal organs in the abdomen are exposed.
7. Look for the pair of ovaries and detach it from other organs (e.g. the intestines).
8. Tease apart the ovarioles (if ovaries are to be used for immunostaining or in situ hybridization).
9. Keep ovaries in ice-cold 1X PBS while dissecting the next fly.

Discussion

Here we demonstrate a method of dissecting ovaries in *Drosophila*. As the method of culturing the different cell types that exist in the *Drosophila* ovary has yet been defined, this is a rapid method to obtain the *Drosophila* ovarian tissue. Essentially, we show that dissecting *Drosophila* ovaries involves a simple two- or three-step procedure. Subsequent treatment of these dissected ovaries depend on the downstream experiments that will be performed.

References

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