CBG
Max Planck Institute
of Molecular Cell Biology
and Genetics

Supplies and Solutions

1. Agarose Pads
2. 18x18 mm coversilps (no. 1)
3. M9 or 4% sucrose, 0.1 M NaCl
4. forceps or worm pick
5. needles (25 -27 gauge)
6. worms

Steps

1. Place a coverslip on a plain glass microscope slide. this provides an easy means of handling the coverslip.
2. Place 2.0 - 3.0 µl M9 or 4% sucrose, 0.1 M NaCl on the coverslip (Fig. 1). The optimal volume will depend on how fast you dissect worms, the pipet, the size of your agarose pad, the coverslip dimensions, etc.
3. Using the forceps, gently pick up one or two worms and transfer them into the medium (Fig. 2). For obtaining healthy early embryos, the best worms to pick are those with clearly visible individual eggs in the uterus (approx. 5-8 per arm). The embroys should appear neatly packaged in a single file within the mother (Fig. 3).
4. Using two needles (Fig. 4), slice the worm open. Preferebly, cut the worm twice (Fig. 5), once near each spermatheca. This should release the earliest embryos (Fig. 6).
5. If the embryos are not released into the medium, use the needles to push any remaining embryos out of the worm. Use the needles to push away any worm carcass that may interfere with observations of the embryos.
6. Invert the agarose pad and slide onto the embryos (Fig. 7). Gently touch the agarose surface to the medium on the coverslip until the medium spreads and the coverslip sticks to the agarose.

Do not apply pressure to the coverslip.

Embryos prepared in this manner are suitable for either DIC or fluorescence videomicroscopy.

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Illustrations