

Materials List for

# C. elegans Gonad Dissection and Freeze Crack for Immunofluorescence and DAPI Staining

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## Materials

| Name                                                       | Company                               | Catalog Number | Comments                                                                                                                                                                                                                                                             |
|------------------------------------------------------------|---------------------------------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Alexa Fluor 488 Donkey Anti-Rabbit IgG Secondary Antibody  | Molecular Probes                      | 711-545-152    |                                                                                                                                                                                                                                                                      |
| Aluminum heating/cooling block                             | Millipore Sigma                       | Z743497        |                                                                                                                                                                                                                                                                      |
| Bacto Peptone                                              | Gibco                                 | DF0118 17 0    |                                                                                                                                                                                                                                                                      |
| Borosilicate Glass Pasteur Pipets, Disposable, 5.75 inches | Fisherbrand                           | 13 678 20B     | Used to make worm picks                                                                                                                                                                                                                                              |
| BSA, Bovine Serum Albumin                                  | VWR                                   | 97061 420      |                                                                                                                                                                                                                                                                      |
| <i>C. elegans</i> wild type (ancestral)                    | <i>Caenorhabditis</i> Genetics Center | N2 (ancestral) |                                                                                                                                                                                                                                                                      |
| <i>C. elegans kle-2 (ok1151)</i> mutants                   | <i>Caenorhabditis</i> Genetics Center | VC768          | The full genotype of this strain is: <i>kle-2(ok1151) IIII/hT2 [bli-4(e937) let-?(q782) qIs48] (I;III)</i> . It has <i>kle-2</i> balanced with a balancer chromosome marked with pharangeal GFP. Pick non-green animals to identify homozygous <i>kle-2</i> mutants. |
| <i>C. elegans spo-11 (me44)</i> mutants                    | <i>Caenorhabditis</i> Genetics Center | TY4342         | The full genotype of this strains is: <i>spo-11(me44) IV / nT1[qIs51] (IV:V)</i> . It has <i>spo-11</i> balanced with a balancer chromosome marked with pharangeal GFP. Pick non-green animals to identify homozygous <i>spo-11</i> mutants.                         |
| Calcium Chloride Anhydrous                                 | VWR                                   | 97062 590      |                                                                                                                                                                                                                                                                      |
| Cholesterol                                                | Sigma Aldrich                         | 501848300      |                                                                                                                                                                                                                                                                      |
| DAPI                                                       | Life Technologies                     | D1306          |                                                                                                                                                                                                                                                                      |
| EDTA, Disodium Dihydrate Salt                              | Apex Bioresarch Products              | 20 147         |                                                                                                                                                                                                                                                                      |
| Embryo Dish, glass, 30mm cavity                            | Electron Microscopy Services          | 100492-980     | Used to practice dissecting; glass is preferred because dissected animals can stick to plastic                                                                                                                                                                       |
| <i>Escherichia coli</i>                                    | <i>Caenorhabditis</i> Genetics Center | OP50           |                                                                                                                                                                                                                                                                      |
| Food storage container, plastic                            | various                               | n/a            | Plastic containers with (1) relatively flat bottoms, to allow slides to rest                                                                                                                                                                                         |

|                                               |                              |              |                                                                                                                                                                                                                                                                         |
|-----------------------------------------------|------------------------------|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                               |                              |              | level; (2) lids that are air-tight, but can still be easily removed without disturbing contents of container, and (3) are about 9 inches long by 6 inches wide are preferred                                                                                            |
| Glass Coplin Jar                              | DWK Life Sciences Wheaton    | 08-813E      |                                                                                                                                                                                                                                                                         |
| Hydrophobic Barrier PAP Pen                   | ImmEdge                      | NC9545623    |                                                                                                                                                                                                                                                                         |
| Kimwipes                                      | Kimtech Science              | 06 666A      |                                                                                                                                                                                                                                                                         |
| Levamisole Hydrochloride                      | Sigma Aldrich                | L0380000     |                                                                                                                                                                                                                                                                         |
| Magnesium Sulfate Anhydrous                   | Fisher Chemical              | M65 500      |                                                                                                                                                                                                                                                                         |
| Needles, Single-use, 25 G                     | BD PrecisionGlide            | 14 821 13D   | blue, 1 inch                                                                                                                                                                                                                                                            |
| NGM Agar, Granulated                          | Apex BioResearch Products    | 20 249NGM    |                                                                                                                                                                                                                                                                         |
| Parafilm                                      | Bemis                        | 16 101       |                                                                                                                                                                                                                                                                         |
| Paraformaldehyde (16% w/v) Aqueous Solution   | Electron Microscopy Sciences | 50 980 487   |                                                                                                                                                                                                                                                                         |
| PBS, Phosphate Buffered Saline (10x Solution) | Fisher BioReagents           | BP399500     |                                                                                                                                                                                                                                                                         |
| Petri Dishes, 60-mm                           | Tritech Research             | NC9321999    | Non-vented, sharp edge                                                                                                                                                                                                                                                  |
| Platinum wire (90% platinum, 10% iridium)     | Tritech Research             | PT 9010      | Used to make worm picks                                                                                                                                                                                                                                                 |
| Potassium Chloride                            | Fisher                       | BP366-500    |                                                                                                                                                                                                                                                                         |
| Potassium Phosphate Dibasic                   | VWR BDH Chemicals            | BDH9266 500G |                                                                                                                                                                                                                                                                         |
| Potassium Phosphate Monobasic                 | VWR BDH Chemicals            | BDH9268 500G |                                                                                                                                                                                                                                                                         |
| Premium Cover Glasses 18 mm x 18 mm           | Fisherbrand                  | 12-548-AP    | 0.13–0.17 mm thickness                                                                                                                                                                                                                                                  |
| Razor Blades, Single Edge                     | VWR                          | 55411 055    |                                                                                                                                                                                                                                                                         |
| SlowFade Gold Antifade Mountant               | Molecular Probes             | S36937       | Alternatives: VectaShield Antifade Mounting Medium (Vector Laboratories, H-1000-10) or ProLong Diamond Antifade (Thermo Fisher Scientific, P36970). If using ProLong Diamond, no nail polish is required for sealing, but slides must cure for 24 hours before imaging. |
| Sodium Azide                                  | Fisher BioReagents           | BP9221 500   |                                                                                                                                                                                                                                                                         |
| Sodium Chloride                               | Fisher Chemical              | S271 500     |                                                                                                                                                                                                                                                                         |
| Sodium Phosphate Dibasic Anhydrous            | Sigma Aldrich                | 7558 79 4    |                                                                                                                                                                                                                                                                         |
| Sodium Phosphate Dibasic Heptahydrate         | Sigma Aldrich                | S9390        |                                                                                                                                                                                                                                                                         |
| Styrofoam box                                 | various                      | n/a          | Approximate dimensions of interior: 12 inches long, 9 inches wide, 8 inches deep                                                                                                                                                                                        |
| Superfrost Plus Microscope Slides             | Fisherbrand                  | 22 037 246   |                                                                                                                                                                                                                                                                         |
| Triton X-100                                  | Fisher BioReagents           | BP151 500    |                                                                                                                                                                                                                                                                         |
| Tryptone                                      | Apex BioResearch Products    | 20 251       |                                                                                                                                                                                                                                                                         |
| Tween 20                                      | Fisher Chemical              | BP337 500    |                                                                                                                                                                                                                                                                         |
| Yeast Extract                                 | Apex BioResearch Products    | 20 254       |                                                                                                                                                                                                                                                                         |