# Materials List for:

**Cell Cycle Analysis in the C. elegans Germline with the Thymidine Analog EdU**

Zuzana Kocissova\(^1,2\), Ariz Mohammad\(^2\), Kerry Kornfeld\(^1\), Tim Schedl\(^2\)

\(^1\)Department of Developmental Biology, Washington University School of Medicine, St. Louis, Missouri  
\(^2\)Department of Genetics, Washington University School of Medicine, St. Louis, Missouri

Correspondence to: Tim Schedl at ts@wustl.edu

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## Materials

<table>
<thead>
<tr>
<th>Name</th>
<th>Company</th>
<th>Catalog Number</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>E. coli</em> MG1693</td>
<td>Coli Genetic Stock Center</td>
<td>6411</td>
<td>grows fine in standard unsupplemented LB</td>
</tr>
<tr>
<td><em>E. coli</em> OP50</td>
<td>Caenorhabditis Genetics Center</td>
<td>OP50</td>
<td></td>
</tr>
<tr>
<td>Click-IT EdU Alexa Fluor 488 Imaging Kit</td>
<td>Thermo Fisher Scientific</td>
<td>C10337</td>
<td>or use EdU provided in kit</td>
</tr>
<tr>
<td>5-Ethynyl-2′-deoxyuridine</td>
<td>Sigma</td>
<td>900584-50MG</td>
<td></td>
</tr>
<tr>
<td>Glucose</td>
<td>Sigma</td>
<td>D9434-500G</td>
<td>D-(-)-Dextrose</td>
</tr>
<tr>
<td>Thiamine (Vitamin B1)</td>
<td>Sigma</td>
<td>T4625-5G</td>
<td>Reagent Grade</td>
</tr>
<tr>
<td>Thymidine</td>
<td>Sigma</td>
<td>T1895-1G</td>
<td>BioReagent</td>
</tr>
<tr>
<td>Magnesium sulfate heptahydrate</td>
<td>Sigma</td>
<td>M1880-1KG</td>
<td>MgSO(_4), Reagent Grade</td>
</tr>
<tr>
<td>Sodium Phosphate, dibasic, anhydrous</td>
<td>Fisher</td>
<td>BP332-500G</td>
<td>Na(_2)HPO(_4)</td>
</tr>
<tr>
<td>Potassium Phosphate, monobasic</td>
<td>Sigma</td>
<td>P5379-500G</td>
<td>KH(_2)PO(_4)</td>
</tr>
<tr>
<td>Ammonium Chloride</td>
<td>Sigma</td>
<td>A4514-500G</td>
<td>NH(_4)Cl, Reagent Plus</td>
</tr>
<tr>
<td>Bacteriological Agar</td>
<td>US Biological</td>
<td>C13071058</td>
<td></td>
</tr>
<tr>
<td>Calcium Chloride dihydrate</td>
<td>Sigma</td>
<td>C3881-500G</td>
<td>CaCl</td>
</tr>
<tr>
<td>LB Broth (Miller)</td>
<td>Sigma</td>
<td>L3522-1KG</td>
<td>Used at 25g/L</td>
</tr>
<tr>
<td>Levamisole</td>
<td>Sigma</td>
<td>L9756-5G</td>
<td>0.241g/10ml</td>
</tr>
<tr>
<td>Phosphate buffered saline</td>
<td>Calbiochem Omnipur</td>
<td>6506</td>
<td>homemade PBS works just as well</td>
</tr>
<tr>
<td>Tween-20</td>
<td>Sigma</td>
<td>P1379-500ML</td>
<td></td>
</tr>
<tr>
<td>16% Paraformaldehyde, EM-grade ampules</td>
<td>Electron Microscopy Sciences</td>
<td>15710</td>
<td>10ml ampules</td>
</tr>
<tr>
<td>100% methanol</td>
<td>Thermo Fisher Scientific</td>
<td>A454-1L</td>
<td>Gold-label methanol is critical for proper morphology with certain antibodies</td>
</tr>
<tr>
<td>Goat Serum</td>
<td>Gibco</td>
<td>16210-072</td>
<td>Lot 1671330</td>
</tr>
<tr>
<td>rabbit-anti-WAPL-1</td>
<td>Novus biologicals</td>
<td>49300002</td>
<td>Lot G3048-179A02, used at 1:2000</td>
</tr>
<tr>
<td>mouse-anti-pH3 clone 3H10</td>
<td>Millipore</td>
<td>05-806</td>
<td>Lot#2680533, used at 1:500</td>
</tr>
<tr>
<td>goat-anti-rabbit IgG-conjugated Alexa Fluor 594</td>
<td>Invitrogen</td>
<td>A11012</td>
<td>Lot 1256147, used at 1:400</td>
</tr>
<tr>
<td>goat-anti-mouse IgG-conjugated Alexa Fluor 647</td>
<td>Invitrogen</td>
<td>A21236</td>
<td>Lot 1511347, used at 1:400</td>
</tr>
<tr>
<td>Vectashield antifade mounting medium containing 4′,6-Diamidino-2-Phenyldione Dihydrochloride (DAPI)</td>
<td>Vector Laboratories</td>
<td>H-1200</td>
<td>mounting medium without DAPI can be used instead, following a separate DAPI incubation</td>
</tr>
<tr>
<td>nail polish</td>
<td>Wet n Wild</td>
<td>DTC450B</td>
<td>any clear nail polish should work</td>
</tr>
<tr>
<td>S-medium</td>
<td>various</td>
<td></td>
<td>see wormbook.org for protocol</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Item</th>
<th>Brand/Model</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>M9 buffer</td>
<td>various</td>
<td>see wormbook.org for protocol</td>
</tr>
<tr>
<td>M9 agar</td>
<td>various</td>
<td>same recipe as M9 buffer, but add 1.7% agar</td>
</tr>
<tr>
<td>Nematode Growth Medium</td>
<td>various</td>
<td>see wormbook.org for protocol</td>
</tr>
<tr>
<td>dissecting watch glass</td>
<td>Carolina Biological</td>
<td>42300</td>
</tr>
<tr>
<td>Parafilm laboratory film</td>
<td>Pechiney Plastic Packaging</td>
<td>PM-996 4 inch wide laboratory film</td>
</tr>
<tr>
<td>petri dishes</td>
<td></td>
<td>60 mm diameter</td>
</tr>
<tr>
<td>Long glass Pasteur pipettes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1ml centrifuge tubes</td>
<td>MidSci Avant</td>
<td>2926</td>
</tr>
<tr>
<td>Tips</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serological pipettes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>500 mL Erlenmeyer flask</td>
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<td></td>
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<tr>
<td>Aluminum foil</td>
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<td></td>
</tr>
<tr>
<td>25G 5/8” needles</td>
<td>BD PrecisionGlide</td>
<td>305122</td>
</tr>
<tr>
<td>5ml glass centrifuge tube</td>
<td>Pyrex</td>
<td></td>
</tr>
<tr>
<td>Borosilicate glass tubes 1ml</td>
<td></td>
<td></td>
</tr>
<tr>
<td>glass slides</td>
<td></td>
<td></td>
</tr>
<tr>
<td>no 1 coverslips 22 x 40 mm</td>
<td></td>
<td>no 1.5 may work, also</td>
</tr>
<tr>
<td>37 °C Shaker incubator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tabletop Centrifuge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical Centrifuge</td>
<td>IEC</td>
<td>428 with 6 swinging bucket rotor</td>
</tr>
<tr>
<td>Mini Centrifuge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 °C incubator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 °C refrigerator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-20 °C freezer</td>
<td></td>
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<tr>
<td>Observer Z1 microscope</td>
<td>Zeiss</td>
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</tr>
<tr>
<td>Plan Apo 63X 1.4 oil-immersion objective lens</td>
<td>Zeiss</td>
<td></td>
</tr>
<tr>
<td>Ultraview Vox spinning disc confocal system</td>
<td>PerkinElmer</td>
<td>Nikon spinning disc confocal system works very well, also, as described here: <a href="http://wucci.wustl.edu/Facilities/Light-Microscopy">http://wucci.wustl.edu/Facilities/Light-Microscopy</a></td>
</tr>
</tbody>
</table>