

Materials List for:

Dissection and Downstream Analysis of Zebra Finch Embryos at Early Stages of Development

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Materials

| Name | Company | Catalog Number | Comments |
|--|---|-------------------|--|
| Chicken egg incubator | | | We use a Picture Window Hova-Bator Incubator, Circulated Air Model |
| Click-iT EdU Alexa Fluor 488 Imaging kit | Invitrogen | C10337 | Detection of cell proliferation. |
| Dissection microscope | | | We use Olympus SZ61 |
| 7" Drummond capillary for Nanoject II injector | Drummond | 3-00-203-G/X | |
| Drummond Nanoject II microinjector | Drummond | | |
| Dumont Tweezers #55 | World Precision Instruments | 14099 | |
| Ethanol (EtOH) | | | |
| 50 ml Falcon tube (polypropylene) | Fisher Scientific | 06-443-18 | |
| FastPrep Lysis Matrix H tubes | MP biomedical | 6917-100 | Used for RNA extraction, used to homogenize embryos |
| Fiber optic illuminator lamps (High Intensity Illuminator) | Dolan-Jenner Industries | Fiber-Lite MI-150 | |
| Glass vials with screw cap (DEPC treated) | Fisher Scientific | 03-338A | |
| Microcentrifuge eppendorf tube (1.5 ml) | Fisher Scientific | 05-408-129 | |
| Mineral oil | Sigma-Aldrich | M-8410 | |
| Modeling Clay | | | Any brand |
| Narshige PB-7 needle puller | Narshige | | |
| Omni Bead Ruptor Homogenizer | OMNI International | 19-010 | Used for RNA extraction |
| 4% Paraformaldehyde (4% PFA): 20 ml 8% PFA (32 g paraformaldehyde, 350 ml sdd H ₂ O, adjust pH to 7.6, 400 ml sdd H ₂ O), 20 ml 2x PBS | Fixation of embryos. Caution, is harmful and do not inhale. | | |
| Phosphate buffered saline (1x PBS): 200 ml 10x PBS, 1,800 ml Barnstead H ₂ O, adjust pH to 7.4 | | | |
| Phosphate buffered saline (10x PBS): 800 ml Barnstead, 2.013 g KCL, 80.063 g NaCl, 2.722 g KH ₂ PO ₄ monobasic, 14.196 g Na ₂ HPO ₄ dibasic, 200 ml Barnstead H ₂ O, adjust pH to 6.5 | | | |
| Phosphate buffered saline with 0.1% Tween-20 (1x PTw): 1,800 ml | | | |

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|---|----------------------|-------------|---|
| Barnstead H ₂ O, 200 ml 10x PBS, adjust pH to 7.4, 2 ml Tween-20 | | | |
| 35 ml Plastic Petri dish | Fisher Scientific | 08-757-100A | |
| plastic wrap | | | Any brand |
| Prepease RNA Spin Kit | PrepEase, Affymetrix | 78766 1 KT | Used for RNA extraction, used to homogenize embryos |
| Reaction Mix: 875 µl 1xPBS, 100 mM 20 µl CuSO ₄ (Kit Component E), 5 µl Alexa Fluor 488 azide (Kit Component B), 100 µl diluted reaction buffer additive (Kit Component F) | Invitrogen | C10337 | Detection of cell proliferation. |
| sdd H ₂ O | | | |
| Seed cup | | | We use it as a container when incubating eggs |
| Stainless steel scalpel | | | |
| Standard nest box | | | We use Abba Plastic Finch Nestboxes |
| 4 ml, Teflon Lined Cap, Glass Vials | Fisher Scientific | 02-912-352 | |
| Transfer pipettes (polyethylene) | Fisher Scientific | 13-711-7M | |
| 4 x 4 weigh paper | Fisher Scientific | 09-898-12B | |