

Materials List for

# Reverse Genetic Approach to Identify Regulators of Pigmentation using Zebrafish

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jove.com/video/62955

## Materials

| Name   | Company                      | Catalog Number | Comments                           |
|--|------------------------------|----------------|------------------------------------|
| 1.5 mL Microtubes  | Axygen                       | MCT-150-A      | For preparing MO solution          |
| 2 mL Microtubes  | Axygen                       | MCT-200-C      | For washing steps in FACS protocol |
| Agarose  | Sigma-Aldrich                | A-9539-500G    | For microinjection                 |
| BD FACSAria II   | BD Biosciences               | NA             | For cell sorting                   |
| Capillary tube   | Drummond                     | 1-000-0010     |                                    |
| Corning cell strainer  | Corning                      | CLS431751      | For making single cell suspension  |
| DMEM High Glucose Media  | Sigma-Aldrich                | D5648          | FACS protocol                      |
| Ethyl 3-aminobenzoate methanesulfonate (Tricaine)              | Sigma-Aldrich                | E10521-50G     | to immobilize ZF for imaging       |
| Ethylenediaminetetraacetic acid disodium salt dihydrate (EDTA) | Sigma-Aldrich                | E5134          | For cold lysis buffer              |
| FACS tubes   | BD-Biosciences               | 342065         | FACS protocol                      |
| Fetal bovine serum (FBS)                                       | Invitrogen                   | 10270          | FACS protocol                      |
| Graphpad prism Software  | Graphstats Technologies      | NA             | For data representation            |
| ImageJ Software  | National Institute of health | NA             | For image analysis                 |
| Insulin Syringes (1 mL)  | DispoVan                     | NA             | For manual dechoriation            |
| Melanin, Synthetic   | Sigma-Aldrich                | M8631          | For melanin content assay          |
| Methylcellulose  | Sigma-Aldrich                | M7027-250G     | to immobilize ZF for imaging       |
| Microloader tips   | Eppendorf                    | 5242956003     | For microinjection                 |
| Morpholino   | Gene-tools                   | NA             | For knock-down experiments         |
| N-Phenylthiourea (PTU)   | Sigma-Aldrich                | P7629          | to inhibit melanin formation       |
| Needle puller  | Sutter Instrument            | P-97           | For microinjection                 |
| Nunc 15 mL Conical Sterile Polypropylene Centrifuge Tubes      | Thermo Fisher Scientific     | 339650         | FACS protocol                      |
| Petridish (60 mm)  | Tarsons                      | 460090         | For embryo plates                  |
| Phenylmethylsulphonyl fluoride                                 | Sigma-Aldrich                | 10837091001    | For cold lysis buffer              |

|                               |                          |              |                       |
|-------------------------------|--------------------------|--------------|-----------------------|
| Phosphate buffer saline (PBS) | HiMedia                  | TL1099-500mL | For washing cells     |
| Pronase                       | Sigma-Aldrich            | 53702        | For dechlorination    |
| Protease inhibitor cocktail   | Sigma-Aldrich            | P8340        | For cold lysis buffer |
| Sheath fluid                  | BD FACSFlo <sup>TM</sup> | 342003       | FACS protocol         |
| Sodium phosphate              | Merck                    | 7558-79-4    | Cold lysis buffer     |
| Triton X-100                  | Sigma-Aldrich            | T9284-500ML  | For cold lysis buffer |
| TrypLE                        | Gibco                    | 1677119      | For trypsinization    |