ATAC-seq in zebrafish

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Notes

The protocol is modified from the lab of José Luis Gómez-Skarmeta (July 2018). The original protocol was for whole *Danio rerio* embryos of 256 cell to 48 hpf stage animals.

Cell Lysis and Transposition Reaction

1. Depending on stage, you might weant to dechorionate embryos with pronase. If so, rinse embryos several times with E3 to remove the pronase.
2. Transfer the tissues to 1.5 eppendorf tubes and remove the E3. Add 0.5 ml of Ginzburg Fish Ringer w/o Ca buffer (55 mM NaCL, 1.8 mM KCl, 1.24 mM NaHC03). Pipette up and down to disolve the yolk. Leave rotating at 1100 RPM for 5 minutes.
3. Centrifiuge at 4 C for 5 min at 500 g.
4. Remove supernatant and wash (one or more times if neccessary) with ice cold 1x PBS.
5. Centrifuge at 4 C for 5 min at 500 g.
6. Resuspend cells in 50 ul of lysis buffer (10 mM Tris-HCL, pH 7.4, 10 mM NaCl, 3 mM MgCl2, 0.1% NP40), and pipet up and down to lyse the cells.

- Recipe for 1 ml lysis buffer: 5 ul Tris 2M pH 7.5, 2.5 ul NaCL 4 M, 3 ul MgCl 1M, 10 NP40 10%, 970 H20.

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