

Zebrafish Embryo Care and Maintenance

Necessary Supplies for Zebrafish Maintenance

Petri dishes 100 x 20 mm - Fisher # 08-757-11Z
Transfer pipettets - Fisher # 13-711-7M
28.5° incubator
MS222/tricaine: fish anesthetic - Ethyl 3-aminobenzoate methanesulfonic acid -
CAS 886-86-2 Sigma # E10521
Aquarium salt
Methylene blue

Embryo Recipes

Egg water
0.6g/L aquarium salt in RO or DI water + 0.01mg/L methylene blue (just
enough to give a lightly blue tint
PTU – Inhibits melanophore formation - CAS 103-85-5
75uM 1-phenyl 2-thiourea in egg water starting at 24hpf
Tricaine Stock
2.5g/L

Embryo Care

Sort out dead/non-viable embryos at 4-6 hpf
Maintain at 28.5° in groups of no more than 60 / 50 ml egg water
Check daily for dead/abnormal embryos and remove promptly
Replace water with fresh egg water at 3 dpf
Maintain embryos no longer than 5 dpf in incubator

Fixation

4% PFA in PBS rocking for 4 hours at RT or overnight at 4°

Imaging

Expose embryos to a dose of 1ml tricaine stock in 50ml egg water
Mount live on a depression slide in 2% methylcellulose - image
Leave embryos in tricaine for no longer than 15 minutes
Wash several times in fresh egg water