

# AQUATIC ZEBRAFISH CORE

## Fin Clipping of Adult Zebrafish

Tricaine (MS-222) can be toxic to adult zebrafish. It is important that the length of anesthetic exposure is kept short. Anesthetize no more than 3 fish at a time. You will need a cutting board (e.g. a mating box lid or another plastic surface), 70% ethanol, razor blades, PCR tubes, forceps, Tricaine (4mg/ml) and ice. Clean all surfaces and instruments with ethanol before you begin the procedure.

- Fill mating cage and insert with fish water and add Tricaine to about 0.2mg/l (5ml Tricaine in 200ml water).
- Add 1-3 fish to Tricaine bath and wait until they stop moving. Gill movement (breathing) should continue throughout the procedure. If gills movement stops, immediately place the fish in fresh system water and continuously observe.
- Remove single fish from tank with net and cut fin edge about 3mm wide, not more than 50% of the fin area. Only cut flat part of fin do not cut into any muscle tissue.
- Pick up fin clip with forceps and transfer to PCR tube on ice.
- Clean cutting surface, razor blade, and forceps with 70% ethanol between specimens. Be sure fish DO NOT come in direct contact with ethanol.
- Transfer fish to recovery tank (without Tricaine) and continue to observe over the next 10 minutes to make sure the fish has resumed normal swimming behavior and movement.
- Clean forceps and cutting board with 70% ethanol. Dispose of razor blade in sharps container.