

Videos relating to Fluorescent Function-Spacer-Lipid construct labeling allows for real-time *in vivo* imaging of cell migration and behaviour in zebrafish (*Danio rerio*)

Chuan-Ching Lan, Deborah Blake, Stephen Henry, and Donald R. Love

Video 1: 2 hours post injection imaging of the caudal vein plexus area of 52 hpf recipient zebrafish receiving 0.2 mg/ml FSL-FLRO4-I transformed WKM cells. In the video, a large slow-moving cell tumbles along the endothelial surface. Elongated oval shaped erythrocytes move at a fast speed.

Video 2: Embryos (50-52hpf) were injected with 0.125 mg/ml FSL-FLRO4-II-treated cells. Window one focused on the eye region.

Video 3: Embryos (50-52hpf) were injected with 0.125 mg/ml FSL-FLRO4-II-treated cells. Window two focused on the heart region.

Video 4: Embryos (50-52hpf) were injected with 0.125 mg/ml FSL-FLRO4-II-treated cells. Window three focused on the first half the yolk extension region.

Video 5: Embryos (50-52hpf) were injected with 0.125 mg/ml FSL-FLRO4-II-treated cells. Window four focused on the caudal half of the yolk extension and the anal regions.

Video 6: Embryos (50-52hpf) were injected with 0.125 mg/ml FSL-FLRO4-II-treated cells. Window five focused on the caudal haematopoietic tissue region.

Video 7: Embryos (50-52hpf) were injected with 0.125 mg/ml FSL-FLRO4-II-treated cells. Window six focused on the tail region.

Video 8: Temporal assessment of FSL-FLRO4-II labeled cells in the lower trunk area. The image was taken 2 hours post injection for the sham-injected fish.

Video 9: Temporal assessment of FSL-FLRO4-II labeled cells in the lower trunk area. The image was taken 2 hours post injection for the fish transplanted with FSL-FLRO4-II treated cells.

Video 10: Temporal assessment of FSL-FLRO4-II labeled cells in the lower trunk area. The image was taken 19 hours post injection for the sham-injected fish.

Video 11: Temporal assessment of FSL-FLRO4-II labeled cells in the lower trunk area. The image was taken 19 hours post injection for the fish transplanted with FSL-FLRO4-II treated cells.

Video 12: Temporal assessment of FSL-FLRO4-II labeled cells in the lower trunk area. The image was taken 43 hours post injection for the sham-injected fish.

Video 13: Temporal assessment of FSL-FLRO4-II labeled cells in the lower trunk area. The image was taken 43 hours post injection for the fish transplanted with FSL-FLRO4-II treated cells.