



Supplementary information, Figure S8. *Ex vivo* cultured zebrafish hearts are functionally intact. (A) Show stable Hyper signals of Tg(*myl7*:Hyper) transgenic heart that was excised and cultured *in vitro* for 45 min, taking Hyper images every 5 min. (B-C) Show image of the ventricular apex of a zebrafish heart under transmitted light (B), and kymograph generated along the black line shown in B (C), demonstrating that the heart contracted with 1 Hz rhythm. Briefly, a high-speed camera was used to capture the contractions of the hearts and then kymograph was generated along the black line shown in B from the movie.