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(continued)
The FlipTrap gene trap system enables fluorescent tagging of full-length endogenous protein in zebrafish, as well as the conditional mutagenesis and targeted manipulation of the trapped gene. Shown here is a 3D projection of a confocal image of a zebrafish heart at 35 h post-fertilization from an embryo that contains two FlipTrap insertions: $Gt(tpm4-citrine)^{ct31a}$ and $Gt(demsa-mCherry)^{ct122ab}$. Expression of the full-length Tpm4-citrine protein was pseudo-color-coded for relative intensity, with white being high signal and blue representing low or no signal. Tpm4-citrine is found in the cytoplasm [white] and is excluded from the nuclei [blue] of the myocardial cells, while the mutant Desma-mCherry protein [pseudo-colored orange] localizes to the boundary of the cells. (For details, see Trinh et al., p. 2306.)