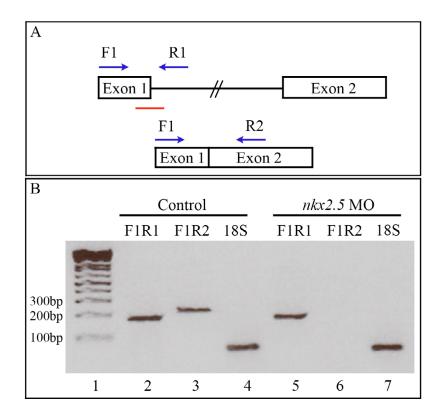
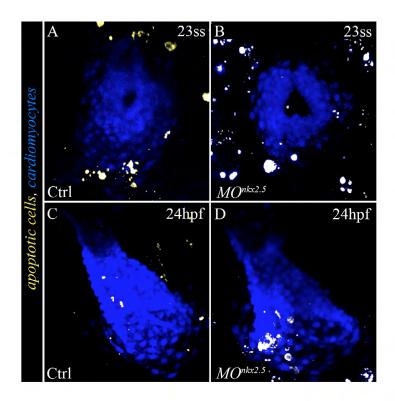


Fig. S1. ALPM expression of ZsYellow protein in Tg(nkx2.5:ZsYellow) embryos. (A,B) 12-somite (A) and 14-somite (B) stages.



**Fig. S2. Validation of the** *nkx2.5* **splice-blocking morpholino.** (**A**) The *nkx2.5* locus showing the morpholino target site (red line) and primer binding sites used to detect *nkx2.5* pre-mRNA (F1-R1) or mRNA (F1-R2). (**B**) Agarose gel electrophoresis of RT-PCR amplification products from control and morphant samples. Whereas pre-RNA (189 bp) transcript levels appear unchanged in morphants [lane 5 compared with lane 2 (control)], morphant embryos are devoid of mRNA transcripts (230 bp) [lane 6 compared with lane 3 (control)]. 18S rRNA served as a loading control (lanes 4 and 7). Experimental strategy based is based on previous work (Targoff et al., 2008). MO, morpholino.



**Fig. S3. SHF progenitors do not undergo aberrant apoptosis in** *nkx2.5* **morphants.** (**A-D**) Confocal images of hearts in 23-somite stage(A,B) and 24 hpf (C,D) control (n=67) and morphant (n=70) embryos ubiquitously expressing the yellow fluorescent apoptosis reporter secA5-YFP (van Ham et al., 2010). Myocardial cells are labeled with a blue fluorescent protein (cerulean). ss, somite stage; hpf, hours postfertilization; Ctrl, control; MO, morpholino.